

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

1

1 NEAL R. GROSS & CO., INC.

2 RPTS SALANDRO

3 HIF318180

4

5

6 RESPONSE AND RECOVERY TO ENVIRONMENTAL

7 CONCERNS FROM THE 2017 HURRICANE SEASON

8 TUESDAY, NOVEMBER 14, 2017

9 House of Representatives

10 Subcommittee on Environment

11 Committee on Energy and Commerce

12 Washington, D.C.

13

14

15

16 The subcommittee met, pursuant to call, at 10:00 a.m.,
17 in Room 2123 Rayburn House Office Building, Hon. John Shimkus
18 [chairman of the subcommittee] presiding.

19 Members present: Representatives Shimkus, McKinley,
20 Barton, Murphy, Blackburn, Olson, Johnson, Flores, Hudson,
21 Walberg, Carter, Walden (ex officio), Tonko, Ruiz, Peters,
22 Green, DeGette, Dingell, Matsui, and Pallone (ex officio).

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

2

23 Staff present: Ray Baum, Staff Director; Mike
24 Bloomquist, Deputy Staff Director; Allie Bury, Legislative
25 Clerk, Energy/Environment; Karen Christian, General Counsel;
26 Jerry Couri, Chief Environmental Advisor; Wyatt Ellertson,
27 Research Associate, Energy/Environment; Adam Fromm, Director
28 of Outreach and Coalitions; Theresa Gambo, Human
29 Resources/Office Administrator; Jordan Haverly, Policy
30 Coordinator, Environment; A.T. Johnston, Senior Policy
31 Advisor, Energy; Mary Martin, Deputy Chief Counsel, Energy &
32 Environment; Alex Miller, Video Production Aide and Press
33 Assistant; Tina Richards, Counsel, Environment; Dan
34 Schneider, Press Secretary; Hamlin Wade, Special Advisor,
35 External Affairs; Everett Winnick, Director of Information
36 Technology; Andy Zach, Senior Professional Staff Member,
37 Environment; Jeff Carroll, Minority Staff Director;
38 Jacqueline Cohen, Minority Chief Environment Counsel; Caitlin
39 Haberman, Minority Professional Staff Member; Rick Kessler,
40 Minority Senior Advisor and Staff Director, Energy and
41 Environment; Jon Monger, Minority Counsel; Alexander Ratner,
42 Minority Policy Analyst; Andrew Souvall, Minority Director of
43 Communications, Outreach and Member Services; Tuley Wright,
44 Minority Energy and Environment Policy Advisor; C.J. Young,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

3

45 Minority Press Secretary; and Catherine Zander, Minority
46 Environment Fellow.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

4

47 Mr. Shimkus. We will ask staff to close the back door,
48 please, and ask the committee to now come to order, and I
49 will recognize myself for five minutes for an opening
50 statement.

51 I want to thank all our witnesses for joining us today.
52 We are especially grateful for those of you who have traveled
53 significant distances to be with us today to share your
54 stories about the hurricanes that tore through our
55 country this fall and about the impact of those hurricanes on
56 the environment.

57 We know that many of you are still in the trenches of
58 dealing with the response and recovery efforts, so your
59 willingness to take the time to be here today does not go
60 unnoticed.

61 This fall, the continental United States and some United
62 States territories in the Caribbean experienced severe
63 weather from five hurricanes, including extensive damage due
64 to landfall from four storms.

65 Hurricane Harvey impacted Texas and Louisiana; Hurricane
66 Irma hit Florida, Georgia, Puerto Rico, and the U.S. Virgin
67 Islands; Hurricane Maria, again, hit Puerto Rico and the U.S.
68 Virgin Islands; and Tropical Storm Nate impacted Louisiana

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

5

69 and Mississippi.

70 The Energy and Commerce Committee is conducting a series
71 of hearings to look at the response and recovery efforts
72 conducted during this hurricane season so we can figure out
73 what went well and what we could we have done better, what we
74 need to do is going -- and what we need to do going forward.

75 We are also focused on what Congress can do to assist
76 the impacted communities as they work to get back on their
77 feet.

78 Today we are focused on the environmental impacts of
79 these hurricanes and the response efforts. No two hurricanes
80 are alike and a storm's individual characteristics like the
81 speed, intensity, and amount of precipitation, play a large
82 role in the extent of the storm's impact on natural resources
83 and the environment.

84 For example, as we will hear from several of our
85 witnesses, Hurricane Harvey may have significantly
86 impacted several Superfund sites in Houston because of the
87 record rainfall and flooding.

88 Likewise, in Puerto Rico, Hurricanes Irma and Maria
89 uncovered the intensified issues associated with aging and
90 inefficient energy infrastructure, contaminated sites that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

6

91 are rapidly multiplying, landfills that are already
92 overflowing, and possibly the most contaminated
93 drinking water supply in the United States.

94 Residents across the island are still without power and
95 reliable source of -- and a reliable source of drinking
96 water. Many are drinking potentially contaminated water
97 because water purification systems have largely failed in the
98 wake of the storm, and in the municipality of Dorado citizens
99 resorted to drinking well water from Superfund sites.

100 Today, we will look at the response efforts by the
101 Environmental Protection Agency and the states for the
102 impacted communities. We will consider environmental issues
103 in the hurricane-impacted communities such as the
104 availability of clean drinking water, the potential for air
105 releases, the impact on Superfund sites and solid and
106 hazardous waste disposal facilities, and risk management and
107 emergency response plans.

108 We hope to hear from the affected EPA regional
109 administrators about their efforts, what they accomplished,
110 what remains to be done, and what can be done better in the
111 future and how Congress can assist.

112 We will also hear from several private sector witnesses

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

7

113 from academia as well as people who are serving in the boots-
114 on-the ground roles in Texas and Puerto Rico, and people who
115 can weigh in on what needs to be done regarding the drinking
116 water systems in the affected communities.

117 Again, I thank all our witnesses for being here. I hope
118 the discussions will start today about the response and
119 recovery efforts, the National Response Framework, and about
120 whether statutory or other changes need to be made.

121 We will adjust the beginning as we continue to oversee
122 and assist the federal and state governments as they carry
123 out the response and recovery efforts for the communities
124 impacted by the hurricanes.

125 And before I yield back my time, I am going to yield 30
126 seconds to Marsha Blackburn.

127 Mrs. Blackburn. Thank you, Mr. Chairman.

128 I want to welcome our witnesses. So pleased that
129 everyone is here. There are so many different aspects to
130 preventing, planning for, responding to the natural
131 disasters, as the chairman has said, and these events are
132 taking a toll on our communities, also on our nation.

133 And so much is involved in it -- today, the
134 environmental aspects, but also looking at the health aspects

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

8

135 and we know that they all have to work hand in hand.

136 I have got a piece of legislation, H.R. 1876, the Good
137 Samaritan Health Professionals Act, that deals with that one
138 component of making certain that people are cared for
139 appropriately.

140 But we thank you for being here. We want to do what is
141 right, we want to be helpful to the process, and we want to
142 make certain that citizens are cared for in these situations.

143 And I yield back.

144 Mr. Shimkus. Gentlelady yields back her time to me, and
145 before I turn to the ranking member I also want to mention
146 that we will have sitting in with us Jenniffer Gonzalez, who
147 is the resident commissioner of Puerto Rico. She's going to
148 be sitting at the dais but per committee rule she can't ask
149 questions. She can't make an opening statement. But when
150 she comes I will make sure I recognize her.

151 With that, I yield back my time and yield five minutes
152 to the ranking member, Mr. Tonko, for five minutes.

153 Mr. Tonko. Thank you, Mr. Chair.

154 It is important that we are holding this hearing and I
155 thank you for doing that.

156 I was sad to hear the news that our friend, the former

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

9

157 ranking member of this subcommittee and the current ranking
158 member of our Health Subcommittee, Gene Green, will be
159 retiring at the end of the 115th Congress.

160 I know Gene was here a few moments ago. But I want to
161 thank him for his friendship and know that he will -- and I
162 certainly know that he will be fighting for disaster
163 assistance for Houstonians for the next 13 months. So we
164 wish him well.

165 And I thank all of our witnesses for being here. It is
166 great to have EPA witnesses join us on this very important
167 topic. I hope Administrator Pruitt will appear before the
168 subcommittee at some point in the near future as well.

169 I want to especially take this opportunity to welcome
170 Administrator Peter Lopez. Mr. Lopez and I have worked
171 together for many years. His former Assembly district
172 overlapped a portion of New York's 20th Congressional
173 District.

174 Our constituents were hit hard by Hurricane Irene and
175 Tropical Storm Lee, and we well know that disasters don't
176 discriminate.

177 Peter, you are an outstanding public servant and I wish
178 you well in your new role and it is great to have you at the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

10

179 witness table today.

180 Mother Nature does not discriminate. She doesn't care
181 if you are a Republican or a Democrat, and our government
182 must be ready to respond to help everyone get back on their
183 feet.

184 So I hope you can take the lessons learned over the
185 years both in the response and recovery efforts and apply
186 them to assist our fellow Americans in need now.

187 We know the recovery effort will be long. But, sadly,
188 in Puerto Rico and the United States Virgin Islands the
189 response effort is still underway.

190 Far too many Americans continue to live without
191 electricity or safe drinking water and that is simply
192 unacceptable.

193 On today's panels we will hear about the work done in
194 the aftermath of Hurricanes Harvey, Irma, and Maria, to
195 address environmental concerns.

196 EPA plays an important role in disaster response by
197 assessing and restoring water systems and Superfund sites,
198 responding to chemical and oil spills, and monitoring air
199 quality.

200 I know there will be a wide variety of issues addressed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

11

201 today including Superfund, chemical safety, air emissions,
202 and debris management.

203 I am particularly concerned about water systems, which
204 we know are often aging and in disrepair, even without the
205 stress of a disaster.

206 There are legitimate questions as to whether state
207 revolving fund loans are the most appropriate vehicle to get
208 communities back on their feet following such devastation.

209 In Texas and in Florida, flood waters were contaminated
210 with bacteria and toxins. Water included high concentrations
211 of E. coli as well as elevated levels of lead, arsenic, and
212 other heavy metals.

213 In Puerto Rico, we have heard stories of people drinking
214 from and bathing in contaminated rivers. There have been a
215 number of reported cases of leptospirosis.

216 The media even reported people using a well located -- a
217 well located on Superfund site, which only after the fact was
218 determined to meet federal drinking water standards.

219 These examples show the direness of the circumstances
220 that Americans faced following these disasters -- no power,
221 no clean water, and driven to acts of desperation.

222 These hurricanes should serve as a reminder that EPA is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

12

223 one of our nation's most essential public health agencies.
224 EPA has important work to do as recovery for these disasters
225 begins.

226 But the drastic proposed reduction to EPA's budget,
227 personnel, and environmental safeguards will make it harder
228 to fulfil its mission including supporting disaster response
229 and disaster recovery.

230 Preserving a strong EPA is critical to the health of
231 Americans. These storms have made that clear. A robust EPA
232 will make communities more resilient.

233 For example, today we will hear about the risks posed to
234 Superfund sites by disasters and the work EPA has done to
235 assess these sites both before and after storms.

236 But the best and perhaps only way to mitigate the risks
237 to these sites is through actual remediation. Reducing
238 funding to the Superfund program will not make cleanups
239 happen any quicker and will not make sites less vulnerable to
240 storms.

241 I would also be remiss if I did not mention climate
242 change and the role EPA should be playing in addressing that
243 threat. If we continue to ignore climate change,
244 increasingly severe disasters will become the new normal and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

13

245 we can expect many more hearings like this one in the future.

246 I hope we can work together to ensure EPA has the
247 resources necessary to support disaster response efforts and
248 make our communities more resilient to disasters before they
249 occur.

250 I look forward to hearing from the witnesses today and
251 yield back and, again, thank you, Mr. Chairman.

252 Mr. Shimkus. Gentleman yields back the time.

253 The chair now recognizes the chairman of the full
254 committee, Mr. Walden, for five minutes.

255 The Chairman. I thank the gentleman.

256 Today marks the third hearing our committee has held to
257 examine the response and recovery efforts for the hurricanes
258 that ravaged our communities along the Gulf Coast and our
259 island territories in the Caribbean.

260 And I would note for the committee in response to our
261 concern about the situations especially in the island
262 territories we will be having a congressional delegation -- a
263 pretty high level limited seating capacity trip -- to Puerto
264 Rico and the Virgin Islands coming up most likely early next
265 month to have -- get a firsthand look at the situation. You
266 will get more information as we go along.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

14

267 Hurricane response and recovery deals with human
268 tragedy. These storms didn't just damage property and
269 displace residents. They delayed dreams and fundamentally
270 altered the lives and fortunes of millions of Americans in
271 ways big and small.

272 While we cannot undo the damage of these storms we can
273 work to ensure the federal government is diligently doing its
274 job to aid recovery and not making it harder to get that job
275 done.

276 Public health risks typically associated with natural
277 disasters including drinking water contamination and the
278 leeching of hazardous waste are varied and include heightened
279 risk of infectious disease, as you all know.

280 These risks can be particularly dangerous for vulnerable
281 populations such as individuals with immuno suppressed and
282 the elderly and infants, clearly.

283 Our job this morning is to better understand who in the
284 context of environmental concerns that bear on public policy
285 is engaging in the tough work to help speed recovery, what
286 they are doing or not doing to make hurricane victims lives
287 better and the challenges they face, when will something
288 resembling normalcy return and where are the resources coming

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

15

289 from to make recovery a reality and what private efforts can
290 be leveraged. So it is all the who, what, when, where, and
291 why and how.

292 We also need to determine whether the federal presence
293 is helping or hurting that recovery and, if so, how do we --
294 how do we change things that need to be changed.

295 Some of the areas we hope to cover today will have to go
296 unaddressed for now. We had hoped to have a Puerto Rico
297 solid waste official testify via video conference about the
298 situation on the ground there.

299 Last week, she confirmed she would testify but then,
300 unfortunately, power went down on the island and our ability
301 to communicate with her was lost.

302 We also hoped to hear from the Federal Emergency
303 Management Agency about its work leading response efforts and
304 improving funding for recovery activities. But they were
305 unable to find someone who could testify. Pretty remarkable.

306 We will continue working with FEMA to ensure these
307 questions are answered so we can feel confident in both
308 statutory authority and administrative practice, support
309 rational decision making, and promote the needs on the
310 ground.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

16

311 That said, I want to welcome our witnesses today. Thank
312 you for being here. Some of you have come great distances
313 but each of you has important lessons for our committee to
314 learn and we appreciate your participation.

315 I am confident that in the midst of all this bad news
316 you will provide us some stories of dedication, innovation,
317 gumption, acts of personal sacrifice, kindness, and courage.

318 These should inspire us to be equally fearless and
319 committed in our work ahead. And in this committee and its
320 broad jurisdiction we do roll up our sleeves and search for
321 solutions to the various challenges that present themselves
322 after a major disaster and we want to make sure the agencies
323 under our jurisdiction are well prepared, responding
324 appropriately, and that lives are improving as a result.

325 If not, we want to know about it so that we can fix it.
326 I expect that this will be an excellent hearing for us to
327 identify vulnerabilities and assess what is needed to better
328 prepare and respond to this and future storms and disasters.

329 So thank you for being here. We look forward to working
330 with you. I know the former chairman of the committee, the
331 vice chairman, has a special announcement he'd like to make
332 now about some of our folks in the audience who are with us

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

17

333 today.

334 So with that, Mr. Chairman, I would yield to the
335 gentleman from Texas the remainder of my time, Mr. Barton.

336 Mr. Barton. Well, I thank you, Chairman Walden. Thank
337 you, Chairman Shimkus and Mr. Tonko, for holding this
338 hearing.

339 I had the privilege way back when -- have been a White
340 House fellow under President Reagan back in 1981 and part of
341 1982 and today I have the current class of White House
342 fellows on their visit to the Hill.

343 They are in the back lefthand corner. They are 14 of
344 the best and brightest young Americans. They work for
345 Cabinet secretaries or agency heads. They are full of vim
346 and vinegar and I told them they are in the best committee in
347 the House. So we want to welcome our White House fellows and
348 wish them the very best in the years ahead.

349 [Applause.]

350 I also want to welcome our two Texas witnesses, Dr. Shaw
351 and Mr. Sam Coleman. Mr. Coleman is the acting administrator
352 -- regional administrator, Region 6, at EPA in Dallas, and
353 Dr. Brian Shaw is head of the TCEQ down in Austin, Texas.
354 They are both good men and good friends of mine. We welcome

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

18

355 them to the committee.

356 With that, I yield back, Mr. Chairman.

357 Mr. Shimkus. Gentleman yields back his time.

358 The chair now recognizes the ranking member of the full
359 committee, Mr. Pallone.

360 Mr. Pallone. Thank you, Mr. Chairman.

361 Environmental impacts from this season's hurricanes have
362 wreaked havoc and continue to threaten public health in
363 serious and unacceptable ways.

364 The federal government's response to these hurricanes
365 has been disorganized and in the instance of both Puerto Rico
366 and the Virgin Islands it has been too little and too late
367 and we must step up our efforts.

368 Two weeks ago, the Subcommittee on Energy held a hearing
369 focused on energy infrastructure recovery efforts, which is a
370 central and ongoing concern, and last week we saw a major
371 setback in the recovery of the electric grid in Puerto Rico
372 when a repair transmission line failed.

373 And today, more than two months after Hurricane Maria,
374 more than half of the island is still without power and that
375 is adversely affecting everything from health care to access
376 to safe drinking water.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

19

377 This lack of electricity puts lives at risk and must be
378 addressed. Unfortunately, at this point, it does not appear
379 that any agency within the federal government is standing up
380 and taking full control of this effort.

381 The Army Corps and FEMA say the other is in charge and
382 that is unacceptable. Someone needs to take the lead now.

383 This is also far from the only challenge facing
384 communities in Texas, Florida, Puerto Rico, and the Virgin
385 Islands.

386 First and foremost is the lack of safe drinking water.
387 This has been a problem in all of the areas affected by these
388 hurricanes and it continues to threaten lives.

389 The severity of these issues show the weaknesses in our
390 drinking water infrastructure and how important it is for our
391 drinking water systems to be more resilient to extreme
392 weather and climate change.

393 Drinking water infrastructure has been a priority for
394 this subcommittee this year and an issue that we have worked
395 on together, and several of the provisions included in the
396 committee's bipartisan drinking water bill could have helped
397 water systems prepare for these storms.

398 But I think we are learning that we need to do even more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

20

399 and that we need to provide more resources to these affected
400 areas, and I hope that we can continue to work together in a
401 bipartisan manner to address the concerns we hear about
402 today.

403 Superfund sites also pose serious risks when natural
404 disasters strike. Several of these dangerous sites were
405 damaged during this hurricane season and we are still
406 struggling to understand the health impacts of that damage.

407 An extreme -- as extreme weather events become more
408 frequent, it is even more important that we clean up
409 Superfund sites quickly and thoroughly.

410 With greater funding for Superfund cleanups we might
411 have avoided some of the damage we have seen and, again, I
412 hope my Republican colleagues will join me in working to
413 address this issue as well.

414 And these hurricanes have also led to significant air
415 pollution with real public health impacts. In Texas, we saw
416 an accidental release of benzene at the Valero refinery and a
417 dangerous series of chemical fires at the Arkema plant.

418 In Puerto Rico and the Virgin Islands, we continue to
419 see dangerously high air emissions from diesel generators
420 which could worsen dramatically as debris management efforts

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

21

421 being in earnest.

422 And if we can't get the power turned back on soon, if we
423 can't get safe drinking water out to our citizens, more
424 Americans are going to die. This is a humanitarian crisis
425 and we must do everything we can to fix it.

426 As Congress prepares the next emergency spending bill,
427 we need to consider all these environmental concerns and do
428 what is necessary to protect human health and the public
429 welfare.

430 We can and should be doing more to increase access to
431 safe drinking water, to secure and remediate Superfund sites,
432 and to limit air pollution.

433 So I just want to thank the witnesses who traveled here
434 today from Texas, Puerto Rico, from the Virgin Islands and
435 from Georgia, and, Mr. Chairman, I look forward to hearing
436 from you. I don't know if any of our Democratic members want
437 the time.

438 If not, I will yield back.

439 Mr. Shimkus. Gentleman yields back his time.

440 We want to thank all our witnesses for being here today
441 and taking the time to testify before the subcommittee.

442 Today's witnesses will have an opportunity to give an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

22

443 opening statement followed by a round of questions from the
444 members. Of course, your full statements are going to be
445 submitted for the record.

446 Our first witness panel for today's hearing will include
447 Mr. Peter Lopez, Regional Administration, Region 2,
448 Environmental Protection Agency; Mr. Trey Glenn, Regional
449 Administrator, Region 4, of the Environmental Protection
450 Agency; Mr. Sam Coleman, Acting Regional Administrator,
451 Region 6, Environmental Protection Agency; and Dr. Brian
452 Shaw, chairman of the Texas Department of Environmental
453 Quality.

454 And with that, we will turn first to Mr. Lopez. You
455 have five minutes, sir.

456 Welcome.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

23

457 STATEMENTS OF PETER LOPEZ, REGIONAL ADMINISTRATOR, U.S.
458 ENVIRONMENTAL PROTECTION AGENCY, REGION 2; TREY GLENN,
459 REGIONAL ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY,
460 REGION 4; SAM COLEMAN, ACTING REGIONAL ADMINISTRATOR, U.S.
461 ENVIRONMENTAL PROTECTION AGENCY, REGION 6; DR. BRYAN SHAW,
462 CHAIRMAN, TEXAS DEPARTMENT OF ENVIRONMENTAL QUALITY

463

464 STATEMENT OF MR. LOPEZ

465 Mr. Lopez. Thank you, Chairman Shimkus and Chairman
466 Walden, Ranking Members Tonko and Pallone, and fellow Energy
467 and Commerce Committee members.

468 I am Pete Lopez. I am the regional administrator for
469 Region 2, which includes all of New York, New Jersey, the
470 Virgin Islands, and eight federally recognized Indian
471 nations.

472 It is a privilege to join you today ~~on~~ **for** this
473 important conversation and my testimony today, please
474 understand, is a snapshot of what's happening as a result of
475 Hurricanes Irma and Maria.

476 Please understand that we are very much in an emergency
477 response mode and that the testimony we offer today is
478 subject to change on a daily basis. So we are doing our best

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

24

479 here.

480 Just to preface, in my years as a member of the state
481 legislature, I was intensely involved in a response very
482 similar to what's happened in the Caribbean.

483 So in upstate New York in 2011, we were ravaged by
484 Hurricane Irene and Tropical Storm Lee. Mr. Tonko and I were
485 partners there working on this issue.

486 In this instance, my parents were homeless. My family
487 was homeless. We had eight feet of water in my village. A
488 similar situation with infrastructure, communications, power
489 grids. The socioeconomic conditions very much the same.

490 If you understand New York geography, northern
491 Appalachia, -- So what we found -- and this is a critical
492 issue for the committee and for the administration -- is that
493 the more disadvantaged the community, the more painful and
494 slow the recovery.

495 So I just -- I can't understate that message and I just
496 wanted to bring it to the committee's conscious thought.

497 Recently, I had a chance to travel to Puerto Rico and it
498 was with my colleague, Deputy McCabe, who is with me today,
499 and I was struck by the incredible destruction, and I have to
500 tell you that the sights, the sounds, the smells were all too

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

25

501 familiar.

502 And as with Irene and Lee, I also have family on the
503 islands in the Arecibo and Camuy area. Lopez family corderos
504 are there as well and we are very concerned about their
505 safety.

506 The focus of the trip was not just to be on the ground
507 but to connect. We met with leaders. We met with leaders of
508 the territories and the Commonwealth, local officials, and
509 our main goal was to connect with them, to identify problems
510 and issues and really help them problem solve.

511 So we are very committed and I have to say the
512 experience was both sobering but also galvanizing. I found
513 that my colleagues on the ground are very passionate about
514 the work they are doing and treat individuals as subjects,
515 not objects. We are concerned about individual families,
516 communities, and the integrity of the entire population.

517 As was noted by some of the introductory remarks, a
518 major challenges remains with the power grid and here, as you
519 can imagine, virtually everything relies on electricity.

520 So whether it is pollution controls at Superfund sites,
521 drinking water and wastewater system operation, all of those
522 things are challenged.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

26

523 Our response has been working with FEMA and Army Corps
524 to place strategically-placed generators at key locations.
525 The challenge, of course, that it provides an alternate power
526 source but the reliability in the long term is at risk here.

527 So they require fuel and even the generators themselves
528 are subject to mechanical failure. So as we try to run
529 around the island we are challenged with the electricity
530 issue.

531 Just want to say in their defense for both FEMA and Army
532 Corps, their job is unprecedented, and I don't want to draw
533 too much of a parallel to Europe after World War II where we
534 talk about the Marshall Plan and off script a little, but the
535 challenges on the island are unique.

536 So in defense of our colleagues with FEMA and Army
537 Corps, their job is extraordinary.

538 EPA has about 325 employees and contractors on the
539 ground and in the Virgin Islands. We hope to have that
540 number increased to about 400 in December.

541 In your testimony you'll see greater detail on the
542 status of power plants -- excuse me, drinking water
543 facilities, hazardous waste facilities, wastewater treatment,
544 Superfund sites, hazardous debris, comingled debris, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

27

545 sunken vessels. You'll see all that in front of you in your
546 testimony.

547 Just as a quick note, we made great progress. We still
548 face a number of changes -- challenges. The power -- outside
549 of the power we have been dealing with waste -- medical waste
550 that has been building up due to logistical limitations.

551 Many roads are still impassable and, as you know,
552 weather conditions have further compromised with mudslides
553 and flooding. That includes area flooding, chronic flooding,
554 as well as destruction to other property.

555 So accessibility on the island is an ongoing challenge.
556 Humanitarian aid -- we have stepped out of our comfort zone
557 and where we are the first responders we are bringing
558 additional humanitarian aid with our staff as we go into the
559 mountainous terrain.

560 So looking to the future, quickly, we know there are
561 unique challenges. The issue of backup power, we heard
562 reference to what do we do for the future. Having backup
563 power and supplies on the island is critical.

564 Positioning those supplies in key areas, particularly
565 with storms advancing, would be very helpful. And, again, we
566 know there are opportunities for improvement always but we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

28

567 welcome the committee's engagement and thank you for this
568 opportunity to be here with you.

569 Thank you so much, Chairman.

570 [The prepared statement of Mr. Lopez follows:]

571

572 *****INSERT 1*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

29

573 Mr. Shimkus. Gentleman's time has expired.

574 And let me for -- just for the record ask the regional
575 administrators to state where the headquarters is and remind
576 our colleagues what states that they represent. We did this
577 in the Energy Sub and I think that is just helpful to keep
578 that all in perspective.

579 So with that, so Mr. Lopez, what are the states and,
580 obviously, protectorates that you cover?

581 Mr. Lopez. Yes, Chairman.

582 So New Jersey, New York, Puerto Rico, Virgin Islands,
583 and eight recognized Indian nations -- tribes and we are
584 headquartered at -- in Broadway, New York City -- 290
585 Broadway.

586 Mr. Shimkus. So let me now turn to Mr. Glenn, Region 4
587 administrator.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

30

588 STATEMENT OF MR. GLENN

589

590 Mr. Glenn. Good morning. Mr. Chairman and esteemed
591 members of this committee, I am Trey Glenn, regional
592 administrator for EPA Region 4, which comprises eight
593 southeastern states.

594 That is Alabama, Florida, Georgia, Mississippi,
595 Tennessee, North Carolina, South Carolina, and Kentucky, and
596 we also have six federally-recognized tribes.

597 Thank you for the opportunity to appear before you today
598 to discuss the impacts of Hurricane Irma and EPA's response
599 and recovery efforts and to continue the productive
600 discussion that we had last month with the subcommittee.

601 I have been on the job a little over two months now and
602 I can honestly say that I am in awe of the caliber and
603 expertise and dedication of the regional staff.

604 These environmental professionals work each day to meet
605 EPA's mission of protecting human health and the environment
606 and this commitment was demonstrated consistently throughout
607 the EPA's response to the devastating hurricanes we
608 experienced this past season.

609 The 2017 hurricane season was indeed unprecedented in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

31

610 the number and intensity of major storms that impacted the
611 United States and the U.S. territories. The damage from
612 these hurricanes is still being assessed. The recovery will
613 continue for the foreseeable future.

614 EPA Region 4 is fully engaged in a number of response
615 and recovery activities and we are working in close
616 coordination with our federal, state, local, and tribal
617 partners as well as businesses and local communities.

618 The core of our emergency response program in Region 4
619 consists of 28 on-the-scene coordinators and 57 additional
620 staff within a response support corps.

621 Prior to landfall of these storms, I personally reached
622 out to the environmental directors of the four states that
623 were in the potential path of this storm to inform them of
624 Region 4's ability to assist if needed.

625 We also reached out to our tribal partners that might be
626 impacted by the storm and Florida was the only state that
627 requested EPA assistance relative to Hurricane Irma.

628 We deployed our Region 4 on-scene coordinator to provide
629 direct coordination and planning support to the state. We
630 also provided a liaison to the FEMA regional response
631 coordination center and deployed EPA regional senior leaders

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

32

632 to south Florida and myself to Tallahassee.

633 We worked closely with EPA headquarters to issue fuel
634 waivers and no-action assurances to assist in not only the
635 preparation but also the response activities for these great
636 storms.

637 We positioned 12 field hazard assessment teams for
638 deployment when and where needed. These teams were deployed
639 at Florida's request to provide oil and hazardous substance
640 response support. We further provided support to the state
641 for orphan container assessment and recovery, vessel
642 pollution response and mitigation, and debris management
643 technical support.

644 Region 4 also assisted with water and wastewater system
645 technical support. We coordinated with the state to monitor
646 the status of more than 1,600 community drinking water
647 systems and over 2,000 wastewater systems.

648 Concurrently, Florida also requested assistance in
649 contacting small noncommunity drinking water systems such as
650 schools and restaurants and the water division completed over
651 1,200 call-down assessments of those facilities.

652 Our hazardous assessment team performed field
653 assessments at more than 200 chemical and oil storage

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

33

654 facilities identified as priorities.

655 We conducted reconnaissance for pollution incidents and
656 orphan containers and there were no significant storm-related
657 hazardous substance or oil pollution incidents in Region 4.

658 We also assisted with orphan container and vessel
659 recovery in the Florida Keys and deployed personnel to
660 provide support to the state and assessment of disaster
661 debris management sites.

662 Our operation in the Florida Keys continues as we speak.
663 We have collected more than 700 orphan containers that are
664 stored in a secure staging area for waste characterization
665 and recycling or disposal.

666 Our EPA team has recovered oil and hazardous materials
667 for more than 65 sunken or grounded vessels and moved these
668 craft to land-based staging areas where they were transferred
669 to the custody of the Florida Fish & Wildlife Commission.

670 Prior to landfall, we assessed vulnerabilities at all
671 Superfund sites in Florida. We also deployed six teams to
672 conduct boots-on-the-ground assessments of all national
673 priority list sites and as a further measure we also deployed
674 teams to assess these NPL sites in Alabama, Georgia, and
675 South Carolina, and all we found is that sites experienced

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

34

676 very little impact from Hurricane Irma.

677 Post-landfall we worked with our state partners to
678 ascertain the status of oil storage facilities required to
679 maintain facility response plans as well as chemical
680 facilities required to maintain risk management plans.

681 Overall, there were very minimal reports of oil and
682 hazardous substance spills that could be attributed to the
683 storm and only one of the RMP facilities contacted reported a
684 hazardous substance release, the source of which was very
685 quickly mitigated.

686 Moving forward, we continue to meet mission assignments
687 under the response phase and have initiated recovery with
688 FEMA and other federal partners under the national disaster
689 recovery framework, and under this framework EPA supports
690 federal partners primarily on community planning and capacity
691 building, infrastructure systems and recovery and natural and
692 cultural resources.

693 We are excited to have the opportunity to work with our
694 federal, state, tribal, and local partners on this very
695 innovative initiative.

696 Again, I thank you for the opportunity to be here and
697 share with you what I consider to be a great example of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

35

698 cooperative federalism to assure and restore public safety
699 and recovery from disaster.

700 I look forward to answering your questions that you
701 have.

702 [The prepared statement of Mr. Glenn follows:]

703

704 *****INSERT 2*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

36

705 Mr. Shimkus. The gentleman yields back his time.

706 The chair now recognizes Mr. Sam Coleman, acting
707 regional administrator of Region 6.

708 Sir, you are recognized.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

37

709 STATEMENT OF MR. COLEMAN

710

711 Mr. Coleman. Good morning, Mr. Chairman and fellow
712 committee members. I am Sam Coleman, acting regional
713 administrator for EPA Region 6, which covers Texas, New
714 Mexico, Oklahoma, Arkansas, Louisiana, and their 66
715 federally-recognized tribes. We are headquartered in Dallas,
716 Texas in downtown.

717 Thank you for the privilege of joining you here today
718 for this very important conversation. I am here to speak
719 directly about EPA's response to the devastating impacts of
720 Hurricane Harvey in Region 6 and our associated response
721 activities.

722 As we have seen in the past three months, every disaster
723 presents unique challenges. Hurricane Harvey hit Corpus
724 Christi as a category four hurricane, then lingered over the
725 Texas Gulf Coast, dropping more than 50 inches of rain in
726 Harris and the surrounding counties, and this impacted over 7
727 million people.

728 EPA worked with Texas and local officials to assess more
729 than 2,200 drinking water systems and more the 1,700
730 wastewater systems.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

38

731 We retrieved over 950 loose containers and, according to
732 FEMA, we worked with the state to make sure that over 20
733 million cubic yards so far of debris has been properly
734 disposed of.

735 At one point, the Texas eCommissioner of eEnvironmental
736 eQuality had over 500 people working on the response and EPA
737 had over 250 people assisting the state in those response
738 activities.

739 One of the most noteworthy aspects of the response to
740 Hurricane Harvey was the positive and collaborative
741 relationship between EPA and the state of Texas.

742 Because we worked very closely with the state agencies
743 and the governor's office, our collective strength of our
744 efforts were greater than the sum.

745 By augmenting state resources where needed and providing
746 some specialized monitoring capabilities, together we were
747 able to address many challenges prevented by Hurricane Harvey
748 in a timely manner.

749 After my 29 years of working at EPA and experiencing
750 events following Hurricane Katrina and the Deepwater Horizon
751 oil spill, I have learned a few key lessons regarding the
752 response activities to assure success.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

39

753 I am going to go over a few of those. First is
754 exercises -- our federal agency's plan for such catastrophic
755 events by conducting exercises to prepare. It is very
756 apparent that these practices lead us to discover our
757 weaknesses and to have time to correct those efficiencies
758 before the real emergency occurs.

759 It is difficult to prepare for such an event as
760 devastating as Hurricane Harvey. However, the state of Texas
761 was as well prepared as I've seen and integrations of our
762 organizations was exceptional.

763 Second is prior coordination. Because EPA has open
764 communication and a longstanding cooperative relationship
765 with our state counterparts and other emergency response
766 agencies, it clears the path for success that benefits the
767 citizens that are impacted by a disaster.

768 When a storm is imminent, EPA begins the coordination
769 efforts before landfall. As soon as the storm passes, we
770 have teams that are standing by to begin the assessment of
771 drinking water and wastewater systems to begin evaluating the
772 environmental integrity of impacted businesses, to begin
773 investigating citizen complaints, and to respond to any
774 reported spills or other damaged areas as well as sharing key

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

40

775 information with the public.

776 Next is the experienced staff. An effective response
777 infrastructure includes experienced first responders who are
778 able to address unforeseen circumstances both swiftly and
779 effectively.

780 Staff development during the preplanning time is of
781 grave importance and should not be underestimated.
782 Experienced responders are the first boots on the ground and
783 they provide the most efficient assistance to communities.

784 And then, finally, is having the right equipment. EPA
785 employed assets during Hurricane Harvey response to assist
786 the responders that were not available elsewhere. EPA often
787 responds to reports of environmental impacts from air
788 emissions or from other plumes that may be dangerous to a
789 community.

790 In response to these complaints and odors and fumes
791 during Hurricane Harvey, EPA deployed a TAGA bus. TAGA
792 stands for the trace atmospheric gas analyzer.

793 This is a mobile pollution detection vehicle that is
794 able to provide air quality results quickly by collecting
795 constant real-time data of outdoor air quality.

796 The TAGA bus monitored ambient air in the vicinity of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

41

797 approximately 25 facilities and adjacent neighborhoods and
798 during that time they covered over 640 miles going back and
799 forth in those communities.

800 The results of this we were able to detect actionable
801 emissions to work -- then to work with those affected
802 facilities and to work with the state to make sure that they
803 were properly addressed.

804 There was also widespread coverage of the fires at the
805 Arkema facility in Crosby, Texas. That facility housed
806 volatile chemicals that required refrigeration to prevent
807 them from self-igniting.

808 When the facility lost power, the conditions
809 deteriorated at the facility, which required an evacuation of
810 the facility and surrounding areas. Ultimately, there was a
811 series of fires that were spontaneous combustion from those
812 materials stored at the site.

813 EPA used the ASPECT aircraft for air sampling above the
814 facility and in the nearby surrounding areas. ASPECT stands
815 for the airborne spectral photometric environmental
816 collection technology.

817 And I know that is a mouthful but, basically, it is an
818 airplane that EPA rents that is packed full of EPA-owned

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

42

819 monitoring equipment so that we can look into the plume to
820 determine if there are harmful levels of chemicals or if
821 there is any danger either downwind or in the communities
822 surrounding the plant.

823 The ASPECT flew 28 flights over 112 hours -- 28 flights
824 and over 112 hours, covering miles of pipeline. We looked at
825 134 risk management facilities and 456 drinking water plants
826 and also 105 wastewater facilities in support of the
827 Hurricane Harvey response.

828 The data was invaluable and assessed the risk quickly in
829 responding appropriately to the emergency and the technology
830 was not available through any other parties involved.

831 The third asset that we used was a mobile laboratory
832 called PHILIS. PHILIS stands for the portable high through-
833 put integrated laboratory identification system.

834 The PHILIS lab is a mobile laboratory that we deployed
835 in Houston that allowed us to get 48-hour turnaround on
836 volatile and semi-volatile samples.

837 This allowed us to quickly assess the conditions at all
838 of the Superfund sites and also any other samples that we
839 needed a quick turnaround.

840 If EPA did not have access to these tools, our response

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

43

841 and the dissemination of information to the public would not
842 have been as informative and robust. I believe that these
843 EPA assets are critical to effective preparedness and
844 response.

845 EPA remains activated as an agency continues to respond
846 to Hurricanes Maria and Irma. The agency taps resources from
847 our sister regions during these times of great need.

848 I have seen the agency continue to grow in our
849 capabilities, learn from each response and apply lessons
850 learned as we face new challenges.

851 We are able to make more data available to the public.
852 For example, we used story boards as we presented this
853 information to the public so that they could understand what
854 each sample meant and how it impacted them personally.

855 EPA will continue to develop more methods and improve
856 our responses by working with our state, local, and other
857 federal agency partners.

858 While the response has its own unique challenges, we
859 want to remain flexible to address the individual needs. I
860 am very proud of the EPA and the other responders when called
861 to duty in these times of great need.

862 I am happy to answer any questions about the great work

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

44

863 we've done and look forward to continuing to serve.

864 Thank you.

865 [The prepared statement of Mr. Coleman follows:]

866

867 *****INSERT 3*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

45

868 Mr. Shimkus. Thank you.

869 Now, last but not least is Dr. Shaw, chairman of the
870 Texas Department of Environmental Quality. You have five
871 minutes, sir.

872 Welcome.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

46

873 STATEMENT OF MR. SHAW

874

875 Mr. Shaw. Good morning. Thank you, Chairman Shimkus,
876 Chairman Walden, and Ranking Member Tonko and members of the
877 committee. It is a pleasure to be here.

878 For the record, my name is Bryan Shaw. I am the
879 chairman of the Texas Commission on Environmental Quality and
880 I am happy to discuss our response in recovery efforts
881 related to Hurricane Harvey.

882 First, my agency's primary mission is to protect the
883 public health and natural resources by ensuring that the air
884 and water and waste are clean and disposed of safely.

885 This is a critical part of what we work to is fulfilling
886 that mission in the aftermath of a disaster such as Hurricane
887 Harvey.

888 While we recognize the many challenges that we face and
889 the severity of the -- of the storm that we had, the key to
890 making the response as successful as it was you have heard
891 demonstrated through the cooperative nature that we have
892 experienced both with our federal allies as well as other
893 state and federal agencies in responding to the hurricane.

894 As was mentioned by Mr. Coleman, TCEQ deployed about 500

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

47

895 people dedicated to the Hurricane Harvey response. The 250
896 or so folks that worked from EPA to work hand in hand with us
897 were critical to addressing one of the major issues we face
898 and that is communication.

899 At the time that the storm rolls through it is very
900 challenging to have the adequate communication and get
901 information in a timely manner because, quite frankly, the
902 local elected officials aren't always as prepared for a
903 hurricane as we might want them to be because typically they
904 are spaced out far enough that this is, in most cases, their
905 first experience at dealing with a hurricane and when you
906 have one of this magnitude it becomes even more critical in
907 having a cooperative relationship between the state and
908 federal agencies that respond.

909 It is critical both to providing that information as
910 well as reassuring those local officials where help is and
911 help is on the way.

912 This cooperation, I think, clearly demonstrates how well
913 state and federal agencies can work together. We tend to
914 work very well with EPA in previous natural disaster response
915 but never better than we worked in this response and I think
916 considering the unprecedented nature of the severity of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

48

917 storm and, quite frankly, the fact that this storm sort of
918 parked over Texas and dumped rain continually, it is -- if
919 you look at the tragic losses we had but in hindsight
920 considering the severity of the storm, the state fared very
921 well and that is attributable to the prior planning, it is
922 attributable to the cooperative relationship we had amongst
923 our different state agencies and, quite frankly, it is
924 attributable to the resiliency and the good neighbors that we
925 have in our state of Texas that we are blessed with that come
926 to the aid of their -- of their neighbor in time of crisis.

927 I think this fits very well into the Cooperative
928 Federalism 2.0 effort that is underway and I think that is --
929 I applaud this committee for looking at finding ways to be
930 able to ensure that the state and federal agencies are
931 working together.

932 The Environmental Council of the States has a process
933 underway called Cooperative Federalism 2.0 which is trying to
934 incentivize and encourage us moving to that relationship that
935 was demonstrated, and so I am very much encouraged by that.

936 I will talk briefly because I know we were running short
937 on time from the standpoint of my allocated time but I want
938 to touch on some of the issues that are ongoing.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

49

939 Obviously, debris management is one of those issues that
940 continues to be a challenge. This is often what I refer to
941 as the slow tragedy associated with an event like this.

942 You see some of that initially when you see the debris
943 from what is taken out through wind, the tornadoes associated
944 with a hurricane, as well as the surge -- the storm surge.

945 But oftentimes the flood damage you don't see initially
946 because those houses seem to be unaffected until you start
947 seeing the residents return back and removing the debris from
948 inside of the houses, getting the drywall out, moving it to
949 the curbs and to the temporary sites.

950 And so it is critical that we move quickly to be able to
951 help that happen because having those materials remain
952 indoors leads to mold and other types of biological
953 contamination that can be poor for health as well as making
954 it very difficult for communities to rebuild.

955 We move it quickly to the curb but you need to move it
956 from there quickly because you have vector issues -- mice,
957 rats, other things -- that can be there -- mosquitoes
958 breeding. And so we want to make sure that we have that
959 process moving along.

960 And then from the temporary site getting it into a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

50

961 landfill and making sure that we are providing for
962 ultimately, environmental and health protections become very
963 critical.

964 We are working probably most of our time at this point
965 dealing with the ongoing tragedies and needs related to
966 disposing of debris, working to quickly identify the
967 temporary sites, ensure that we are working with those local
968 officials not just to make sure that all the bureaucratic I's
969 are dotted and T's are crossed but in making sure that we are
970 both safe, protective, and ensuring that we don't have issues
971 that will prevent them from getting reimbursement from those
972 recovery efforts because those communities have already been
973 hard hit from the loss of their tax base, their houses, and
974 their businesses. And so we work very diligently to ensure
975 that moves quickly.

976 So we are continuing to have success there but we will
977 continue to have those calls that come as judges and mayors
978 realize that the removal process is too slow and we work and
979 continue to provide resources to help them both from a
980 technical standpoint as well as, when we can, providing
981 physical labor and the expertise on the ground.

982 Air monitoring -- we have heard some discussion from Mr.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

51

983 Coleman so I won't go into a lot of detail other than to
984 point out that we have a plan in place, our -- I call it our
985 common sense approach where we make sure that prior to a
986 storm's landfall we take down equipment that is going to
987 likely be damaged or destroyed in a hurricane and then very
988 quickly bring it back up.

989 That takes some time, especially when, in many cases, we
990 had to wait until we had power restored to an area to be able
991 to get air monitors in place.

992 We relied very heavily on our federal partners to be
993 able to do sampling as we had case by case needs as well as
994 deploying monitors that we could bring in to assess plumes
995 and other issues associated with potential emissions from
996 facilities.

997 I will quickly wrap with drinking water, wastewater
998 issues. As was mentioned, we had a couple thousand drinking
999 water systems that were in the path of the storm. We still
1000 have two of those that are inoperable. They are small
1001 systems and arrangements have been made to allow for them to
1002 have water brought in so those residents are getting their
1003 needs served.

1004 But we still have 24 systems that are under boil water

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

52

1005 notice, some of that because of damage to the system and some
1006 of that because, frankly, they're still adjusting to the
1007 source water changes associated with the storm.

1008 Wastewater and sewage, we still have three of those
1009 systems that are inoperable compared to the 40 at the height
1010 of the process. So it does take a good bit of time.

1011 I will close with talking about our hazmat, and we do
1012 work cooperatively but we take the lead with regard to
1013 identifying containers that may be washed away or moved away
1014 during the storm.

1015 And to date, we've had about almost 1,200 of those
1016 containers that have been located and properly disposed of as
1017 well as dealing with the spills associated with the storm.

1018 So you can see that there is a broad range of issues
1019 that have to be addressed and working cooperatively allows us
1020 the best chance of being most responsive to our citizens.

1021 And with that, I will thank you for the opportunity to
1022 visit with you about this issue. We do have many resources
1023 available on our website and I am happy to provide those web
1024 links as needed. Those are very helpful both in informing
1025 the public as well as elected officials about resources that
1026 are available to them.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

53

1027 I am happy to answer questions. Thank you, sir.

1028 [The prepared statement of Mr. Shaw follows:]

1029

1030 *****INSERT 4*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

54

1031 Mr. Shimkus. The gentleman's time is expired.

1032 And before I start with the opening question, I want to
1033 recognize Jennifer Gonzalez, the resident commissioner from
1034 Puerto Rico.

1035 She's here at a good time to hear the opening statements
1036 but also, as I go to my first round of questioning, the first
1037 one is going to go to Mr. Lopez.

1038 So I recognize myself for five minutes for questions.
1039 Mr. Lopez, there have been a number of press reports about
1040 people who are without clean drinking water, drinking from a
1041 well on a Superfund site in Dorado, Puerto Rico.

1042 Can you explain the situation there and whether it has
1043 been resolved?

1044 Mr. Lopez. Certainly, Chairman, and thank you for that
1045 question.

1046 So, again, of course, there was a lot of attention to
1047 early concerns of the individuals drinking from the wells.
1048 Those reports were incorrect.

1049 So, in essence, there has been some understandable
1050 confusion with the way the infrastructure is designed and
1051 operable in that area.

1052 So the wells in question are sealed. They are not

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

55

1053 accessible. Water has been made accessible through spigots
1054 at those well sites that are part of the super aquifer tied
1055 to process infrastructure.

1056 When we first learned about the concern, our first
1057 response, of course, was humanitarian and we brought bottled
1058 water and had Army Corps bring water buffaloes to the sites
1059 because the main concern was we want to protect human health
1060 and safety, take them away from sites where we had any
1061 question, and make sure people had potable water.

1062 From there we engaged in immediate sampling and from the
1063 results of the sampling we found chlorine residual from those
1064 spigots. Certainly, wells are not prone to have chlorine in
1065 them inherently and so our initial deduction was that that
1066 was treated water.

1067 We have gone forward to do additional sampling and are
1068 doing full spectrum analysis. Thus far, our results reaffirm
1069 and process also reaffirm that along with the Department of
1070 Health from Puerto Rico that that is part of a processed
1071 water supply. They are not from the contaminated wells.

1072 Mr. Shimkus. Are there any other places on the island
1073 where this issue may be an issue?

1074 Mr. Lopez. Not to our knowledge and, again, the concern

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

56

1075 -- and just to highlight, Chairman, the concern with the
1076 Superfund site -- and this is part of the challenges --
1077 Superfund site doesn't mean that every water source within
1078 the designated area is in question.

1079 What it means in this case with the Dorado site we
1080 identified a target area -- we, at EPA -- just to monitor.
1081 So where sites were known to have contamination those sites
1082 have been locked down. Other sites we continue to test -- I
1083 say we, the Puerto Rico Department of Health -- PRASA -- on a
1084 regular basis to make sure that those supplies remain potable
1085 and within Safe Drinking Water Act thresholds.

1086 Mr. Shimkus. Was the Puerto Rican water utility the
1087 entity distributing water at the Dorado site?

1088 Mr. Lopez. The Puerto Rico Well Authority -- PRASA --
1089 was not literally distributing the water. The areas in
1090 question were fenced and signed. There are spigots there and
1091 the sites were entered into and PRASA was not knowingly
1092 willingly distributing.

1093 But we -- again, our main concern there was to make sure
1094 that the water was safe and that is why we brought temporary
1095 water until we could ascertain the status of the true supply.

1096 Mr. Shimkus. So in your written statement, Mr. Lopez,

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

57

1097 when you -- in your written testimony you note that 20 of the
1098 115 drinking water plants are out of -- out of service. What
1099 is -- what are you doing to remedy the situation about people
1100 not having access to potable water in Puerto Rico?

1101 Mr. Lopez. Well, our challenge, of course, Chairman, is
1102 we assess. So we determine where there are deficiencies,
1103 whether it be collapse of trunk sewers, whether power be out,
1104 and then we work with Army Corps, which is mission assigned
1105 to work with PRASA to make the repairs.

1106 So funding is provided through the Stafford Act to help
1107 make necessary improvements. We continue to help provide
1108 advisories to the population and, again, we are working with
1109 our partners to make necessary repairs as quickly as
1110 possible.

1111 Mr. Shimkus. Let me, in my last minute and a half, turn
1112 to Mr. Shaw, or Dr. Shaw. My sister-in-law move out of
1113 Houston right before the storm.

1114 But she has a lot of friends back there and she visited
1115 over the weekend and it raises the point about waste
1116 management that you were referring to.

1117 On her return she showed a picture of her friend's
1118 house. About two and a half to three feet of drywall had

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

58

1119 been ripped out. I mean, still, the house will be -- take a
1120 year probably or I don't know how long to get it. But so
1121 that -- so when we see storm damage, which we have in tornado
1122 season, you see the initial pile of refuse on the streets.
1123 But then over time you're going to see the refuse from being
1124 torn out. They're probably going to be in dumpsters and
1125 they're going to be hauled someplace.

1126 So the question is, is there sufficient land -- landfill
1127 capacity with this hurricane debris?

1128 Mr. Shaw. The answer -- the short answer is yes. And
1129 you are right, part of that process is moving from the house
1130 to the curb. Usually there is about three passes of removing
1131 from the curb as well. So it is sort of a cyclical process.

1132 We looked at it very closely and initially estimates
1133 were quite high what the debris might be.

1134 The issue is we have enough capacity in those landfills
1135 in the areas. The real challenges have been twofold. One,
1136 does it reduce the length of life of that landfill, which is
1137 obvious.

1138 The second part of that is sometimes those landfills,
1139 because they build them out in cells, they may not have a
1140 cell that is built out ready to receive all that debris, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

59

1141 so in some cases they may have to exceed their permitted
1142 height and we have a process whereby they can apply to make
1143 that happen on an emergency basis.

1144 What will happen is following the passing of the storm
1145 they will either have to come in and remove that extra cap or
1146 they will have to go through a permit amendment to get
1147 approval to leave that landfill at a height that was higher
1148 than was permitted and then they can build out another cell,
1149 if you will, and move that waste or at least begin taking new
1150 waste.

1151 Mr. Shimkus. I am way over my time and I thank you for
1152 the answer.

1153 The chair now recognizes the ranking member, Mr. Tonko,
1154 for five minutes.

1155 Mr. Tonko. Thank you, Mr. Chair.

1156 Administrator Lopez, as I mentioned earlier, the
1157 committee has heard alarming reports of people without access
1158 to safe drinking water in Puerto Rico and the United States
1159 Virgin Islands, and I heard the exchange with the chair here
1160 just moments ago.

1161 Let's get a little deeper into the drinking water and
1162 wastewater system issue. Many remain inoperable. Can you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

60

1163 help us understand what are the sources of those problems of
1164 inoperation?

1165 Mr. Lopez. Much of the problem lies with damaged sewer
1166 -- excuse me, water mains. We have damaged distribution
1167 lines. Power is a considerable issue.

1168 We, again, are working on generators but those
1169 generators do not always remain operable. So access is an
1170 issue. We have had plants that, because of mudslides or
1171 rain, river action, we have had them -- access to them
1172 denied.

1173 So at this point, 85 percent of the PRASA system users
1174 have water and PRASA represents about 97 percent of all the
1175 water supply to the island.

1176 There are additional water supply sources -- non-PRASA
1177 systems, very small sources. There are very -- there are
1178 about 237 independent water treatment systems throughout the
1179 mountains.

1180 We are working with mission assignment, with
1181 nongovernmental operations to do work there. In some of
1182 those cases we are, again, trying to get those systems back
1183 and running. But power, in some case physical damage, in
1184 some case access. We also have debris issues. In some case,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

61

1185 intakes are clogged with debris and that has been a challenge
1186 for some of our operators.

1187 Mr. Tonko. And just what percent or whatever expression
1188 we can get from you is concerning electricity failure?

1189 Mr. Lopez. Oh, my gosh, I have -- I have some detail.
1190 So I can go through -- I have -- I have a number. I will
1191 just run through -- I have a list. Arecibo alternate power
1192 unit out of service. Esperanza, alternate power service out
1193 of Muñiz. We have quite a few. Most of it is power units.

1194 We do have waterline pipes broken. We do have some
1195 cases of water supply -- raw water supply clogged. But much
1196 of it is power and, again, we are using generators and other
1197 means to try to activate those systems. Some systems were
1198 flooded and they had to be reassessed even before power could
1199 be fully restored.

1200 Mr. Tonko. And you had mentioned the infrastructure
1201 failure. What about source water contamination as an issue?
1202 Is that --

1203 Mr. Lopez. We are -- of course, we are very concerned
1204 about it and I used a phrase Ms. Colon would understand, agua
1205 es vida -- water is life.

1206 So whether it be water for drinking, water for bathing,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

62

1207 water for washing your clothes, water for any purpose, we are
1208 all very concerned.

1209 We have been -- in terms of the contamination of water
1210 our role has been, first, direct resources to restore water
1211 and systems to be operable. That's the main goal.

1212 With individual homes and families we are working with
1213 the CDC, Puerto Rico Department of Health, and others to
1214 provide advisories. So boiled water advisories are in
1215 effect, have been in effect.

1216 We are also warning people to be -- to avoid using these
1217 supplies for potable purposes. We have worked with the CDC
1218 to provide alternate disinfection where possible -- chlorine
1219 tablets and other alternate disinfection. So we are taking -
1220 -

1221 Mr. Tonko. Oh, go ahead.

1222 Mr. Lopez. As broadly as we can we are trying to
1223 respond. But the challenge is we can't control individual
1224 human behavior and people need water. So our main goal is
1225 get water to them as quickly as we can -- potable.

1226 Mr. Tonko. Peter, you had mentioned PRASA and with
1227 those independent systems -- those beyond PRASA -- are they
1228 continuing to struggle to provide safe drinking water?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

63

1229 Mr. Lopez. They are. We are working with them and,
1230 again, it is case by case. Just mind you that a number of
1231 the systems are mountainous and access to them continues to
1232 be an issue.

1233 So we are working on assignment to get to them. But at
1234 this point, we had -- we have assessed -- bear with me a
1235 second. Just going to pull up my notes here on non-PRASA.
1236 There are 237 independent community systems and we have
1237 assessed them all. But getting them all operational is a
1238 challenge.

1239 Mr. Tonko. And of those 237, which are operating?

1240 Mr. Lopez. Let me -- bear with me just a second. About
1241 170 of the 237 are operational.

1242 Mr. Tonko. Okay. Thank you.

1243 And is EPA testing water quality at small water systems?

1244 Mr. Lopez. We do. Well, the Department of Health --
1245 let me say this -- the Department of Health for Puerto Rico
1246 is the authority. So our sampling is really not something we
1247 do as a norm.

1248 We did sample in the Dorado case where there were
1249 concerns about drinking from contaminated wells and there we
1250 wanted to do rear guard action for the Puerto Rico Department

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

64

1251 of Health.

1252 But Puerto Rico Department of Health maintains primacy
1253 with those -- with those sites.

1254 Mr. Tonko. Thank you.

1255 Mr. Chair, I yield back.

1256 Mr. Shimkus. Gentleman yields back his time.

1257 Chair now recognizes the gentleman -- the chairman of
1258 the full committee, Mr. Walden, for five minutes.

1259 The Chairman. And I thank the chairman and I thank,
1260 again, our witnesses for your testimony on all these issues
1261 our citizens face.

1262 I know, Mr. Lopez, you've talked a lot about the
1263 drinking water and we know when the power goes off the pumps
1264 don't run and purification doesn't work unless you get
1265 generators and all that.

1266 But I would like to move beyond that and ask about the
1267 ability to clean up Superfund sites. How is that being
1268 impacted along the way here?

1269 Mr. Lopez. So, Chairman, the Superfund sites were
1270 assessed -- they have been assessed routinely. They were
1271 assessed before the storm events -- Irma. They were assessed
1272 after Irma. They have been assessed after Maria.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

65

1273 And much of those sites really are groundwater
1274 contamination. So they were not really moved by the storm.
1275 The issue for the storm and where there was damage were in
1276 terms of fencing and also pump and treat systems, which
1277 required power.

1278 So in those cases, we worked to restore those functions.
1279 That's what we've been working to do and the -- in terms of
1280 damage --

1281 The Chairman. How --

1282 Mr. Lopez. I am sorry, sir.

1283 The Chairman. How far along are you on that -- the
1284 Superfund site protection?

1285 Mr. Lopez. To my -- to my knowledge, that is -- things
1286 are locked down.

1287 The Chairman. Okay.

1288 Mr. Lopez. So if we've seen additional concerns -- for
1289 example, we found an orphan container that was removed -- but
1290 we are to lock those sites down, Chairman.

1291 The Chairman. Mm-hmm. All right. Is that true for the
1292 other sites, too? I mean, are we talking about issues in
1293 Houston or Florida? Are there any Superfund issues we need
1294 to be aware of?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

66

1295 Mr. Coleman. With regards to Texas, there were 34
1296 federal Superfund sites in the state of Texas. We have done
1297 the assessment of all. There was one site that we listed,
1298 the San Jacinto Waste Pits site, that did require some
1299 additional follow-up.

1300 We have been working with the responsible parties. They
1301 have plans in place to both do repairs to that site and then
1302 there is some additional repairs on the river side of the
1303 site where there was scouring that the PRPs are in the
1304 process of placing some additional rock to stabilize that
1305 portion of the site. That is ongoing.

1306 The Chairman. All right.

1307 Mr. Shaw. And I would just add there is -- I believe
1308 there are 17 state Superfund sites and at those we worked
1309 very closely with EPA on both the federal and the state and
1310 secured the sites.

1311 All those sites we're finding there was a release
1312 potentially from one that was a sheen that we saw on water
1313 and that has been dealt with. So but no offsite concerns at
1314 this point. Everything is locked down.

1315 The Chairman. So can you call give us assurance then
1316 that when it comes to the issue of Superfund sites we are not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

67

1317 contamination into drinking water, that these sites are
1318 secured best they can be, that you've got this under control?

1319 Mr. Shaw. Yes, sir.

1320 Mr. Coleman. Yes, sir.

1321 Mr. Glenn. Yes, sir.

1322 Mr. Lopez. Yes, sir.

1323 The Chairman. Perfect. That's good news. I think that
1324 had a lot of us worried, including, I am sure, all of you.
1325 You know, that is the most dangerous things we face.

1326 Beyond that, you know, as we -- as we keep hearing about
1327 the power going on and going off in Puerto Rico and we knew
1328 they had a bad grid to begin with, what should we be worried
1329 about here?

1330 What can we do to help here on that issue of power and
1331 how much of this is really the responsibility of the grid
1332 owner and the power provider in Puerto Rico?

1333 Mr. Lopez. Well, Chairman, again, I think part of the
1334 challenge is, as I mentioned in ~~the~~ my testimony, the system
1335 itself is old.

1336 The Chairman. Right.

1337 Mr. Lopez. And we heard testimony from Army Corps with
1338 the infrastructure -- Transportation Infrastructure Committee

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

68

1339 suggesting that their average age of power plants are much
1340 younger than Puerto Rico's.

1341 So we are dealing with a system that was old and
1342 challenged to begin with and I think part of our goal is,
1343 one, how do we put power back on but the long-term and --

1344 The Chairman. Keep it on.

1345 Mr. Lopez. -- and for Señora Colon [Speaking foreign
1346 language] -- my family has that name as well -- how do we
1347 make sure that it is sustainable and survivable for future
1348 events. So that is an open question.

1349 The Chairman. And from what you have seen on the
1350 ground, again, on Puerto Rico or the Virgin Islands
1351 especially, are there -- are there enough crews? Are the
1352 various agencies communicating well with each other?

1353 Are there gaps in that communication we should be aware
1354 of? It is always hard in these situations, I know, but --

1355 Mr. Lopez. So, Chairman, we work under a command and
1356 control function. We work with our incident commanders.
1357 There's very close communication with FEMA, Army Corps, our
1358 other partners.

1359 Our regions have been providing support where we signal.
1360 We have been very thankful to my colleagues here for their

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

69

1361 staff support as well.

1362 I would say that the communications are strong. The
1363 challenge is making sure that we can get the resources when
1364 we need them.

1365 The other challenge which we have been working at is
1366 also making sure that we are working with the local
1367 authorities and respecting their process -- their decision
1368 making capability, and that is -- that means in some cases we
1369 have to put things in front of them and give them time,
1370 recognizing -- and this is the challenge for those in the
1371 situation -- if you have been in a storm event and you are
1372 under constant duress, we are rotating crews in and out
1373 routinely --

1374 The Chairman. They are there --

1375 Mr. Lopez. -- they are working under constant duress.
1376 So part of our challenge is helping support their decision
1377 making and give them time and support they need so they can
1378 be at peace with mission objectives and corrective action.

1379 The Chairman. Okay. Did you have something you wanted
1380 to -- no? Okay.

1381 My time has expired. Mr. Chairman, thank you all for
1382 the great work you and your teams and the teams from all the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

70

1383 agencies are doing the best they can in these circumstances
1384 and we appreciate that.

1385 But, again, we want to know if there is a problem that
1386 you need help on or they need help on, and I know that our
1387 resident commissioner has been terrific at bringing us all up
1388 to speed and keeping us up to speed.

1389 So with that, Mr. Chairman, I yield back.

1390 Mr. Shimkus. Gentleman's time has expired.

1391 The chair now recognizes the ranking member of the full
1392 committee, Mr. Pallone, for five minutes.

1393 Mr. Pallone. Thank you, Mr. Chairman.

1394 Five years ago, Superstorm Sandy caused major damage to
1395 my congressional district including Superfund sites and water
1396 treatment facilities and we have seen even more of that with
1397 the latest hurricanes.

1398 So I would like to focus briefly on the importance of
1399 investing and making our environmental infrastructure more
1400 resilient.

1401 In the aftermath of Sandy, I saw the importance of this
1402 firsthand when the storm badly damaged the Bay Shore Regional
1403 Sewage Authority, which treats the wastewater from a number
1404 of the towns in my district, and the authority completed a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

71

1405 \$28 million project to rebuild the plant and make it more
1406 resilient to future storms.

1407 But I don't think we should have to wait for disasters
1408 to make our infrastructure more resilient. So let me ask Mr.
1409 Lopez, what can EPA do to help communities in Puerto Rico and
1410 the Virgin Islands improve their drinking water and
1411 wastewater infrastructure to make it more resilient?

1412 Mr. Lopez. Thank you. Thank you, Chairman.

1413 So part of the challenge is, again, part of it is the
1414 time we are in. Under the Stafford Act, we are in response.
1415 So this is an emergency. So it is my understanding that
1416 Stafford Act funding means you build in kind -- you replace
1417 in kind.

1418 So the issue is, and this goes back to you as our
1419 partner and our colleagues here, where do we signal
1420 programmatic and funding flexibility to allow other sorts of
1421 investment.

1422 Now, just as an example, with the nongovernmental allies
1423 that we have had with the nonprocess sites, we have been able
1424 to put solar systems in a few isolated incidents.

1425 Mr. Pallone. All right.

1426 Well, let me ask you this. Do you think that we need to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

72

1427 invest more federal dollars though in environmental
1428 infrastructure in general as part of this recovery or is it
1429 just your concern that we are not focusing on long term?

1430 Mr. Lopez. So I am a little bit above my pay grade,
1431 Congressman, but bear with me. So I am going to speak from
1432 the heart.

1433 So, effectively, it is a function of targeting dollars -
1434 - making sure dollars are reachable and also ensuring that
1435 the broad purposes can be served.

1436 So, again, we have many various funding streams. It is
1437 not generally one funding stream, like my colleague, Mr.
1438 Cochran knows.

1439 Mr. Pallone. Okay.

1440 Mr. Lopez. So to answer your question, I think part of
1441 our challenge here would be to look at funding streams, look
1442 at resources, ensure that we have maximum flexibility in
1443 their use. Part of this --

1444 Mr. Pallone. Okay. And particularly the emphasis on
1445 looking at long-term rather than just short-term to fix
1446 things.

1447 All right. I am just rushing through because I wanted
1448 to ask a question about the Superfund, too. As you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

73

1449 Hurricane Harvey damaged a lot of Superfund sites in Texas
1450 including one site where hazardous dioxins were exposed and I
1451 think we should be doing more to limit the impact of severe
1452 weather on Superfund sites.

1453 So let me ask Mr. Coleman. You only briefly mentioned
1454 Superfund. But is it -- it is a priority, I think, for a lot
1455 of communities. Do you agree that more resources for
1456 Superfund cleanups would mean few contaminated sites
1457 vulnerable to extreme weather?

1458 Mr. Coleman. So the site in Texas that you mentioned --
1459 the San Jacinto Waste Pits site, is a site that is under EPA
1460 oversight but there are accountable responsible parties who
1461 are both responsible for the day to day security of the site
1462 as well as --

1463 Mr. Pallone. But my question is do you agree that more
1464 resources for Superfund cleanup would mean fewer contaminated
1465 sites vulnerable to extreme weather? You can just say yes or
1466 no. I mean, I just want to know if you think money or
1467 resources would make a difference.

1468 Mr. Coleman. Well, we are working with the funds that
1469 are appropriated to make sure that those sites that require
1470 federal funding are cleaned up as expeditiously as possible.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

74

1471 Mr. Pallone. All right. All right.

1472 Let me go back to Mr. Lopez. We heard troubling reports
1473 out of Puerto Rico, citizens drawing drinking water from a
1474 well on an unsecured Superfund site. What more could EPA do
1475 to protect public health from exposures to toxic sites after
1476 severe weather strikes?

1477 Mr. Lopez. So, Chairman, as I was mentioning to your
1478 colleagues, the contamination in the groundwater was really
1479 not affected by the storms, to our knowledge.

1480 The issue was making sure that the mitigation methods
1481 that were in place were functioning as intended -- fencing,
1482 pump and treat seat systems.

1483 The -- in Dorado, the wells in question were not
1484 accessible. Power supplies had been disabled. There was no
1485 ability to pull water from the wells. So the source of
1486 water, again, was from the -- from PRASA, from the public --

1487 Mr. Pallone. Do you think that we could do more to
1488 protect -- could EPA do more to protect public health from
1489 exposure to toxic sites after severe weather strikes or,
1490 again, this is just simply fixing damage?

1491 I mean, the concern I have is, again, what you said --
1492 that maybe we are just simply fixing damaged fences, blocking

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

75

1493 access to these sites. I mean, this goes back maybe to what
1494 you were saying before. But just --

1495 Mr. Lopez. So at those sites the wells were not
1496 accessible of for public access, again, the groundwater
1497 contamination was there before the storm and ~~remains and~~ that
1498 is something we continue to work on.

1499 So our challenge is to mitigate -- again, track any
1500 plumes, for example, in the Dorado site. We are tracking a
1501 plume so we test water supplies. We test -- vigilance is
1502 really the issue here.

1503 We remain vigilant and we certainly understand the
1504 importance of making sure that we are staying within Safe
1505 Drinking Water Act standards, keeping people under those
1506 thresholds with their water supply.

1507 Mr. Pallone. All right.

1508 Mr. Lopez. So monitoring, continue testing -- those are
1509 -- and then mitigation remain the tools available to us.

1510 Mr. Pallone. All right. Thanks a lot.

1511 Mr. Shimkus. Gentleman's time expired.

1512 The chair now recognizes the vice chairman of the
1513 subcommittee, Mr. McKinley, for five minutes.

1514 Mr. McKinley. Thank you, Mr. Chairman, and thank you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

76

1515 again for having this hearing on this.

1516 Let me skip from Region 2, 4, and 6 and move to Region 3
1517 out of Philadelphia. There's an area that -- the flooding
1518 that had taken place the hurricanes had an impact not only in
1519 Texas and Florida and Louisiana, along the coast, but it had
1520 a demonstrative effect in north central West Virginia, in
1521 eastern Ohio, northern West Virginia, western Maryland,
1522 western Pennsylvania in the streams.

1523 The water that -- the amount of water that came down
1524 during that period of time we washed out -- our streams were
1525 full of debris, full of items that should have been dredged,
1526 and as a result we had water lines lost, exposed.

1527 We had septic systems that were destroyed. We had water
1528 pumping stations that went down because of this. So I am
1529 just curious -- and we had loss of life in north central West
1530 Virginia as a result of this.

1531 So it is not just happening with hurricanes in the
1532 coastal areas that we are talking about -- the ravaging that
1533 took place. It has had an effect on the central part of this
1534 country as well.

1535 So my question, when they try to get the dredging of
1536 these streams so that they can mitigate the potential loss,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

77

1537 often we are hearing from the region -- the EPA is they won't
1538 give permits.

1539 They go through an extended permitting period. Either
1540 that, or FEMA steps in the way or an environmental group
1541 steps in the way.

1542 So if we are going to mitigate the potential loss and
1543 the environmental impact, what would you suggest that we do
1544 in other areas to clean up our streams if the EPA continues
1545 to stand in the way of dredging? Any one of you?

1546 Mr. Lopez. Yes. Yes, sir, I can help with that and,
1547 again, it is funny how life brings you -- moves you forward.

1548 So with Irene and Lee in northern Appalachia -- again,
1549 we are just north of you. I had Southern Tier. I had the
1550 Susquehanna River Valley. We had the Catskill region.

1551 To answer your question, part of our challenge is, is as
1552 we get into these streams we have to be very careful because
1553 any impact upstream can have an impact downstream.

1554 In my home community, the urgent response was to just
1555 dig into streams and we wound up channelizing our streams.
1556 Water began flowing faster and destabilizing the stream banks
1557 and emergency evacuation routes were compromised.

1558 Short story is as we get in, we are working with NRCS,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

78

1559 others -- DEC and New York State -- to try to look at it from
1560 a watershed basis.

1561 Some of it means restoring flood plains. Some of it
1562 means restoring the natural flow of the streams. Getting in
1563 to clear debris can be an ongoing mission but we also have to
1564 recognize that we have to give room for streams almost like a
1565 living organism to get rid of energy and to have a place --

1566 Mr. McKinley. I understand.

1567 Mr. Lopez. So --

1568 Mr. McKinley. But the EPA and FEMA are standing in the
1569 way of permitting to do that. We have got to -- we had -- at
1570 Follansbee, West Virginia, they have had a -- their stream is
1571 eight feet of gravel and sand have built up in that so as a
1572 result of this they had no capability of absorbing the amount
1573 of water that came down and homes were washed out as a
1574 results of this.

1575 Mr. Lopez. So -- so --

1576 Mr. McKinley. So I am saying --

1577 Mr. Lopez. You know, Chairman, respectively, I have
1578 Region 2 so I am your neighbor in New York, in particular,
1579 similar topography.

1580 I can only tell you that the partnership there has been

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

79

1581 with the state agent. DEC has been the agent in charge. EPA
1582 has worked --

1583 Mr. McKinley. The state keeps blaming the federal
1584 government. What -- where are we supposed to get through
1585 this so that we can mitigate the potential loss?

1586 We can eliminate a lot of these damages and the
1587 environmental impact if we could clean our streams out. But
1588 they -- other people keep blaming Region 3.

1589 Is there something you can suggest? Is it happening in
1590 other areas that you're seeing a more successful relationship
1591 to dredge these --

1592 Mr. Lopez. Congressman, if I may, what I'd like to do
1593 with your permission is take your information back to our
1594 headquarters --

1595 Mr. McKinley. Please.

1596 Mr. Lopez. -- see if we could research this issue for
1597 you.

1598 Mr. McKinley. Please. The other has to do also when
1599 Rick Perry say said that hitting a Category 4 which had such
1600 devastating effect on the petrochemical industry and has been
1601 suggesting that we build a secondary facility in Appalachia
1602 with a ethane storage facility in the north central eastern

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

80

1603 Ohio and western Pennsylvania. As a result, maybe we
1604 wouldn't have such loss of product if we had something other.

1605 So I really appreciate the fact that the commissioner
1606 and Pruitt all are working together to try to find a
1607 secondary source on this -- a supply.

1608 I think it would eliminate some problem because we know
1609 that when that hit -- Hurricane Harvey hit, out of the 23
1610 cracker facilities in the -- in the Houston area 17 went
1611 down.

1612 So as a result, it had that ripple effect all across the
1613 country that people couldn't get resident supplies and
1614 companies had to reduce their workforce as a result of it.

1615 So I am hoping that we can continue to learn from this
1616 problem that has occurred and how we can have a secondary
1617 source, and we are not going to have both environmental
1618 impact and economic impact.

1619 I yield back.

1620 Mr. Shimkus. Gentleman's time has expired.

1621 The chair now recognizes the gentleman from California,
1622 Mr. Peters, for five minutes.

1623 Mr. Peters. Thank you, Mr. Chairman, and thanks to the
1624 witnesses for being here.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

81

1625 You know, I think -- I spend a lot of time when I see
1626 these awful disasters come they -- they, obviously, cause a
1627 lot of dislocation and tragedy.

1628 They also cost us a ton of money at the federal
1629 government for cleanup, and I think a lot about what you
1630 might have learned as part of the cleanup that you might
1631 advise us to invest in ahead of time.

1632 So what are the things that maybe you've observed that
1633 you think, boy, if the federal government had invested in
1634 this beforehand we would have saved a lot of money in the
1635 long run.

1636 Anything in general that you gentleman saw? Maybe Dr.
1637 Shaw?

1638 Mr. Shaw. Yes. Thank you.

1639 Certainly, that is part of what we -- we have an ongoing
1640 process of trying to do the lessons learned and to that end
1641 we are in our second week of our after action review to learn
1642 the right lessons from this.

1643 Part of what I think addresses your question is the fact
1644 that we have -- the governor has put together a commission to
1645 rebuild Texas and part of what we are looking at there is
1646 identifying what are those resilience issues, opportunities,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

82

1647 and needs both to build back infrastructure but also what do
1648 you do -- what is that next step you would do if you had
1649 additional funds or funds --

1650 Mr. Peters. Anything in particular in mind right now?

1651 Mr. Shaw. There are things like several -- sometimes it
1652 is a reservoir -- excuse me, a retention systems. We have
1653 dykes and levy systems that have been proposed and often are
1654 waiting on funding.

1655 Mr. Peters. Okay.

1656 Mr. Shaw. And so there are projects that had been
1657 approved and are just waiting on funding that would help to
1658 mitigate some of those flood issues.

1659 So those sorts of things are obvious and so we are
1660 trying to put together a better holistic package of what it
1661 looks like statewide but especially in the Hurricane Harvey
1662 impacted area.

1663 Mr. Peters. That seems wise to me.

1664 Before I leave you, Dr. Shaw, have you had -- we have
1665 had a lot of -- we have had issues with massive sewer spills
1666 that have flowed and come from Tijuana up into San Diego,
1667 which I represent.

1668 I wanted to see if you've had any experience in dealing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

83

1669 with clean water and health issues with the CDC or FDA in
1670 connection with the issues you face in Texas.

1671 Mr. Shaw. Not specifically.

1672 Mr. Peters. How has that been?

1673 Mr. Shaw. Not specifically CDC and FDA. We partner,
1674 obviously, with EPA very closely on our -- on our water
1675 quality issues but I've not had experiences with CDC and FDA
1676 on those issues.

1677 Mr. Peters. Okay.

1678 Maybe, Mr. Lopez, if you had any general responses to
1679 that question about Puerto Rico. I had a specific one, but
1680 any general thoughts about what resiliency the federal
1681 government might be involved in building in so that we don't
1682 face the quantity of destruction that we saw this time next
1683 the wastewater --

1684 Mr. Lopez. Thank you, Congressman.

1685 And, again, we mentioned a little bit about flexibility
1686 with funding to ensure that as rebuild occurs or as we move
1687 forward, because recognize that once we leave the response
1688 mode we head into recovery and that is going to be a very
1689 long conversation.

1690 And for any of my colleagues here we know that that is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

84

1691 not just months. That may be years, and that may include
1692 additional rebuilding, reinvestment, flexibility of funding.

1693 The other thing that I was discussing with my colleague
1694 -- my deputy, Ms. McCabe -- is the issue of, in that case,
1695 having resources available or prepositioned, having --

1696 Mr. Peters. Right.

1697 Mr. Lopez. -- because of -- because of their isolation
1698 having resources prepositioned would be very helpful.

1699 Mr. Peters. Let me go back a step, because you are
1700 still -- I think you are still -- you are still framing the
1701 response issue. Let me just --

1702 Mr. Lopez. We are very raw there. Yes, sir.

1703 Mr. Peters. -- give you an example of something that I
1704 just read about, which is Tesla restoring power to the
1705 Children's Hospital in Puerto Rico with a solar and storage
1706 project.

1707 Now, it seems to me, I know -- I think that Puerto Rico
1708 burns bunker fuel, which is a logistical issue. You've got
1709 to get that -- you got to get there and, obviously, it speaks
1710 to the age of the power plant.

1711 You have got -- I mean, I am sure you had a grid issues
1712 that are affected by the wind. But it does seem to me --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

85

1713 what I noticed in Puerto Rico was after the storms stopped,
1714 the sun was shining, and had there been distributed energy
1715 through solar -- smart solar investments, things like
1716 hospitals would be up online ahead of time.

1717 I would certainly suggest that that is something we
1718 ought to be thinking about in these island places which are
1719 so isolated you can't just send a truck of bunker fuel out
1720 there.

1721 Had we invested in solar in some of these facilities,
1722 particular the -- around the critical infrastructure like
1723 hospitals -- the Children's Hospital -- ahead of time, I
1724 think, you know, a lot of these people wouldn't -- wouldn't
1725 have been affected in the same tragic ways.

1726 I guess -- maybe I will turn to Mr. Glenn and Mr.
1727 Coleman. Do you have any sort of lessons learned in terms of
1728 pre-disaster investments we might be considering right now so
1729 that next time this happens we won't be so on our heels?

1730 Mr. Glenn. Well, I am fairly new to the federal
1731 government. I have been here two months --

1732 Mr. Peters. Welcome.

1733 Mr. Glenn. -- and prior to that in the private sector.

1734 Thank you. I am enjoying it. Here is what --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

86

1735 Mr. Peters. I enjoy it sometimes.

1736 [Laughter.]

1737 Mr. Glenn. Here is what I walked in and observed
1738 literally day one on this was the communications interaction
1739 and relationships that we had with our peers at the state
1740 level and at the local level as well.

1741 So the one lesson I learned was we cannot do enough
1742 coordination with our state and local and tribal partners to
1743 make sure that we know what their systems are, we know who
1744 the people are and we train together and work together so
1745 that we can respond to this and that is the huge takeaway I
1746 had from this for the -- relative to the impacts in our
1747 region.

1748 Mr. Peters. Thank you.

1749 Mr. Coleman, my time is expired but maybe someone else
1750 will ask you the question.

1751 Thank you. I yield back.

1752 Mr. Shimkus. Gentleman yields back his time.

1753 The chair now recognizes the gentleman from Houston,
1754 Texas, Mr. Olson, for five minutes.

1755 Mr. Olson. I thank the chair.

1756 I would like to start out with a point of personal

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

87

1757 privilege. Yesterday we found out that --

1758 Mr. Shimkus. Not again.

1759 Mr. Olson. -- found out that a fellow Texan -- this is
1760 good. Not good but sad. A fellow Texan, Gene Green,
1761 announced this will be his last term in Congress.

1762 He is a dear friend, a great Texan. We will miss you,
1763 but thank you for your service, my friend.

1764 Welcome to our four witnesses. A special Texas Aggie
1765 howdy to Chairman Shaw, and my question will be for you,
1766 Chairman Shaw and you, Mr. Coleman.

1767 First of all, could both of you talk about the sorts of
1768 hazards you saw in the Houston area and all of the area
1769 impacted by Harvey after Harvey left?

1770 I know, for example, we had some pretty foul water that
1771 threatened with bacterial infections and we had debris piles
1772 that were magnets -- as mentioned, snakes, rates, other
1773 animals.

1774 In fact, a young girl who lives in Texas 22 in Sienna
1775 Plantation was out working in Wharton, was bit by a
1776 copperhead snake in a pile of wet soaked clothes. So my
1777 question is do we know anything about how to respond to these
1778 threats with Harvey or was it just a larger scale of what you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

88

1779 know you have to deal with when a storm hits like Harvey did?

1780 Mr. Shaw. Thank you, Congressman.

1781 Certainly, with regard to this event, it is -- a lot of
1782 the issues you see are common to a flood event but uncommon
1783 from this nature of the magnitude and the breadth of the
1784 impacted area.

1785 So with regard to flood waters, anytime we have
1786 floodwaters that are going to inundate wastewater treatment
1787 plants you are going to have bacterial contamination and that
1788 is why our response cooperatively with the EPA was to provide
1789 information about how to deal with contamination from flood
1790 water.

1791 With regard to the debris, certainly the magnitude of
1792 the debris is a challenge and it is exacerbated because of
1793 the fact that you have waste haulers, for example, that may
1794 have contracts up and down the coast and when you have -- the
1795 impacted area is up and down the coast you don't have enough
1796 resources there potentially to respond in a timely manner and
1797 it is just, you know, 30-plus million cubic yards of debris
1798 is an awful lot of debris to deal with.

1799 Mr. Coleman. And I would just say that during a natural
1800 disaster or any type of disaster there are many, many

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

89

1801 hazards. Our goal really is to inform the public very
1802 quickly of how they can best protect themselves while they
1803 are also trying to restore and recover their own property.

1804 With regards to flood waters, we really advise people to
1805 minimize their exposure because the waters are contaminated
1806 and there are many hazards associated with that.

1807 You mentioned some of the other things. People have to
1808 really wear protective equipment and be completely vigilant
1809 as they work on their individual property to restore that. I
1810 meant, that is very, very important and we work closely with
1811 our state and local partners to make sure that that
1812 information is put into the hands of every individual so that
1813 they understand what they have to deal with.

1814 Mr. Olson. You mentioned the constant threats out
1815 there. For example, a first responder in Missouri City had a
1816 flesh-eating virus. Somehow, it got into his -- he had a
1817 little small cut probably from working through a debris field
1818 and got exposed to that virus. So thank you, thank you for
1819 getting ahead of the curve.

1820 And you guys mentioned, I think -- if I quote you
1821 correctly, Mr. Coleman, you said the coordination between you
1822 and Dr. Shaw was, quote, "exceptional," and I think it was on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

90

1823 the ground and that is what -- that is my opinion as well.

1824 But I have concern. You said you prepared for that with
1825 exercise after exercise with TCEQ. How do you do that with a
1826 storm like Harvey, a big storm like that, and also how about
1827 with three storms?

1828 You have Irma and Marie hit at that same time. Can you
1829 coordinate with different regions as opposed to TCEQ? I
1830 mean, boy, that is a big challenge, isn't it?

1831 Mr. Coleman. Yes, sir. It is a big challenge. We work
1832 very closely. There is an annual hurricane exercise that the
1833 state organizes that involves EPA, the Corps of Engineers,
1834 other state agencies as well where we really go through the
1835 game planning as to who does what making sure we have all of
1836 the proper contact information, everybody knows what their
1837 lane is, and what capabilities that they bring to the table.

1838 So we participate in that. We also work on a daily
1839 basis to deal with much smaller incidents with the state so
1840 that our staff and their staff know each other well and they
1841 work seamlessly together to respond to these incidents.

1842 Mr. Olson. Dr. Shaw, you want to add something to that?

1843 Mr. Shaw. Yes. I would -- I would say that we actually
1844 -- in one of those exercises we had the foresight to mock up

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

91

1845 a response to a Category 3 hurricane making landfall in
1846 Corpus Christi.

1847 Harvey was a 4, making landfall just north of Corpus
1848 Christi, but it points out the fact and the way I usually
1849 characterize the importance of these exercises is we need to
1850 make sure that whenever we show up for the real thing we are
1851 not making introductions to our colleagues and counterparts
1852 in other agencies.

1853 We already know who they are. We know them by face and
1854 by name, and so those exercises are priceless so that we can
1855 hit the ground running, not having to make introductions to
1856 try to figure out a game plan.

1857 We already have the game plan. We've already practiced
1858 it. We begin implementation.

1859 Mr. Olson. Thank you. Mr. Chairman, I noticed my time
1860 has expired and I will close by saying at 9:54 this morning
1861 all four witnesses confirm they are happy my Houston Astros
1862 won the World Series title.

1863 I yield back.

1864 Mr. Shimkus. I hadn't heard that before so thanks for
1865 letting us know that.

1866 The chair now recognizes Mr. Green for five minutes.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

92

1867 Mr. Green. Well, I am proud of the Astros, too. But I
1868 want to thank our panel for being here and thank the chair
1869 and the ranking member for holding the hearing today on
1870 Hurricanes Harvey, Irma, and Maria.

1871 I also want to thank our panelists -- for the panel,
1872 particularly Administrator Coleman and Dr. Shaw, and I know
1873 the partnership that you've had between our regional office
1874 of EPA and the state has been -- even when I was in the
1875 legislature years ago.

1876 And I want to thank the EPA for the decision last month
1877 after our new administrator viewed the site to remove the
1878 cancer-causing dioxins out of the San Jacinto Waste Pits, and
1879 that is both on the north side of Interstate 10 and the south
1880 side of Interstate 10. And it is an important issue in east
1881 Harris County.

1882 I have represented it off and on over the years, first
1883 as a state senator and then in Congress and I shared it with
1884 Ted Poe. Now I share it with Congressman Brian Babin.

1885 So we need to fully remove the contaminated soil and
1886 accelerate it with the recovery -- discovery of the damage
1887 and the temporary cap during Hurricane Harvey.

1888 Administrator Coleman, what is the time line for EPA to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

93

1889 begin the removal of the contaminated material from the San
1890 Jacinto Waste Pits?

1891 Mr. Coleman. Thank you, Mr. Green, for that question.

1892 So, as you know, we've issued the recommended decision
1893 in October. We are working with both the Justice Department
1894 and the responsible parties on this special notice and
1895 negotiating a consent decree that will facilitate the
1896 specific design and then removal.

1897 Specifically, we expect the negotiations to take six to
1898 12 months in working with the responsible parties. The
1899 design activities can take as long as another six to 12
1900 months and then the work will start.

1901 So I can't give you a specific time frame because those
1902 negotiations are complex and do involve a number of issues
1903 that we have to work through with them.

1904 So but that is generally what we expect to see.

1905 Mr. Green. Okay. Well, I would hope you would provide
1906 information and EPA has been doing it to the constituents out
1907 there for, like I said, mostly Congressman Babin now. But I
1908 sure have a lot of people who go out and crab and fish right
1909 near those sites and I would -- we'd like to make sure
1910 they're not, well, consuming that but also to make it much

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

94

1911 more safer.

1912 And so the process will take almost a year, and I
1913 understand the difference because the temporary cap is about
1914 a \$20 billion and then the permanent cap or the permanent
1915 removal is anywhere -- the latest estimate, I think, from EPA
1916 was almost \$120 billion.

1917 Mr. Coleman. That is correct -- \$115 million to \$120
1918 million.

1919 Mr. Green. And so I expect the responsible parties have
1920 the option of going to the courthouse and making that
1921 decision. But I understood the original report from the
1922 regional office to the national office was really strong
1923 opinion on what needed to be done.

1924 Our district also includes -- and this is in our
1925 district and has been forever, it seems like -- the U.S. oil
1926 recovery in Pasadena, Texas, it is actually on a -- near a
1927 bayou in Texas. Pete's gone but it is Vince Bayou coming
1928 through Pasadena and into the Houston ship channel or Buffalo
1929 Bayou. And many members of the public and local media voiced
1930 concern about that toxic material mitigating into the Vince
1931 Bayou.

1932 Was there any information from that site that it -- did

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

95

1933 any of that site bleed into the -- into Vince Bayou and
1934 ultimately Buffalo Bayou and the Houston ship channel?

1935 Mr. Coleman. Again, thank you for that question.

1936 As you know, the U.S. oil site consists of two nearly
1937 adjacent locations but they are separated by a road and they
1938 are different in elevation.

1939 So the former city of Pasadena wastewater treatment
1940 plant was flooded and because of the nature of what they did
1941 there, which was treat wastewater, we do recognize that there
1942 were probably some releases of things that were at that site.
1943 But we also know that they never stored hazardous waste or
1944 recycled oil on that portion of the site.

1945 The second portion of the site, which is located at a
1946 higher elevation, where they did process oils to recover,
1947 that site actually did not flood.

1948 It did, of course, sustain over 50 inches of rainfall.
1949 So some of the buildings which are in somewhat disrepair
1950 there was rainfall that entered the buildings.

1951 There was some -- we would call it storm water runoff
1952 that occurred and we did assess Vince's Bayou. We looked
1953 very closely at the receding waters and collected samples.
1954 We did not see that anything significant left that upper

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

96

1955 portion where the waste oil was processed.

1956 So we feel confident that Vince Bayou only received some
1957 runoff from that lower area that was the former Pasadena
1958 wastewater treatment plant.

1959 Mr. Green. Okay. Is there a viable --

1960 Mr. Shimkus. Quickly, please.

1961 Mr. Green. -- or responsible party for the U.S. oil
1962 site?

1963 Mr. Coleman. Yes, sir. We are working with the
1964 responsible parties. They say a group of investors who are
1965 actually working to both maintain stabilization of the site
1966 as well as working with us on a more thorough investigation
1967 and, ultimately, a cleanup of that site.

1968 Mr. Green. Thank you, Mr. Chairman.

1969 Mr. Shimkus. Gentleman's time has expired.

1970 The chair now recognizes the gentleman from Ohio, Mr.
1971 Johnson, for five minutes.

1972 Mr. Johnson. Thank you, Mr. Chairman, and gentlemen,
1973 thank you for joining us today.

1974 Mr. Lopez, prior to the hurricanes hitting Puerto Rico
1975 this season, most people would have characterized the
1976 municipal solid waste landfills as a mess even on a good day,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

97

1977 with 19 of the 29 landfills operating out of compliance with
1978 federal law.

1979 So what's the status of the landfills in the -- in the
1980 wake of the hurricanes today?

1981 Mr. Lopez. So the landfill status, of course, as you
1982 mentioned, we had challenges and continue to be challenges on
1983 the island.

1984 Debris management, which is really the response, is a
1985 complicated undertaking. So there is pressure, of course, to
1986 put more material into the landfills.

1987 But what we are attempting to do, working with Army
1988 Corps and our partners, is to separate the waste streams and
1989 dispose of them in a fashion that relieves pressure on the
1990 landfills.

1991 So whether it be vegetative debris or hazardous medical
1992 waste -- any number of elements that could wind up in a
1993 landfill -- we are working aggressively to separate out and
1994 dispose of, working with the authorities in a proper fashion.

1995 Mr. Johnson. So are they still a mess?

1996 Mr. Lopez. So a landfill situation that existed prior
1997 to the hurricane remains --

1998 Mr. Johnson. No. No. What are -- what's the status

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

98

1999 today?

2000 Mr. Lopez. So the landfills continue to operate as they
2001 did before. There has been no change in that.

2002 Our challenge -- incident challenge is handling the
2003 debris, keeping the landfills functioning but also handling
2004 the debris which could accumulate in the landfills if not
2005 properly intercepted.

2006 Mr. Johnson. Do you -- do you think that Puerto Rico
2007 should keep its delegation authority under Subtitle D?

2008 Mr. Lopez. Ultimately, the -- and, again, we -- this
2009 will be a longer-term conversation, Congressman. So our
2010 challenge will be to help support the local authorities. I
2011 feel that that is the appropriate thing to do.

2012 We want to support them, give them capability, help
2013 provide resources where we can and also address other ways
2014 other than landfilling to address their solid waste.

2015 But recognize that that is not EPA's function as a -- as
2016 a role. We don't usually do solid waste management. We
2017 defer to the local government authorities for the actual
2018 management of solid waste.

2019 Mr. Johnson. Is it -- is it fair to say that current
2020 debris removal since the hurricanes -- current debris removal

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

99

2021 is going to further overload the already filled capacity in
2022 those landfills?

2023 Mr. Lopez. We are working to intercept it. There is a
2024 danger -- there is always a possibility. But we are working
2025 very aggressively and thoughtfully with the leadership to
2026 identify waste streams and properly provide siting to
2027 separate them out and mitigate them appropriately. So there
2028 is always a potential but we are working to minimize the
2029 impact.

2030 Mr. Johnson. Okay.

2031 Mr. Coleman, in your testimony you write that while each
2032 response has its own unique challenges, we remain flexible to
2033 address individual needs.

2034 So as you indicated, things like geographical
2035 constraints, economic conditions, damage extent, and
2036 infrastructure vulnerabilities are all factors that shape
2037 federal agency response when a natural disaster strikes.

2038 In other words, how we respond to Houston's challenges
2039 is clearly different than those of Puerto Rico's challenges.
2040 So how does the EPA currently ensure response efforts take
2041 these challenges and regional characteristics into
2042 consideration?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

100

2043 Mr. Coleman. So we work -- we have a national cadre of
2044 responders that work very closely together on training and
2045 that forms the baseline of how we respond.

2046 As I mentioned, we have a set of technical assets -- the
2047 ASPECT, TAGA, PHILIS -- that also provide that specialized
2048 equipment. But then we work very closely with our state
2049 partners in each location as well as those other state
2050 agencies that we work with ~~with~~ our FEMA regional offices,
2051 with things called regional response teams that then do
2052 additional specialized training and facilitation as it
2053 relates to the specific incidents that may occur in different
2054 geographic areas.

2055 So those multiple layers of training exercises, having
2056 the right equipment, allows us to then be adaptable and
2057 flexible in responding to all types of different disasters
2058 and events.

2059 Mr. Johnson. Okay. Is there room for improvement?

2060 Mr. Coleman. I believe that there's always room for
2061 improvement and, as Chairman Shaw indicated, the state does
2062 ~~an~~ after-action report. We do -- we are doing a similar
2063 exercise. We participate with the state side.

2064 But we also have them participate and critique our work

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

101

2065 so that we can make improvements and we do that after each
2066 event and we memorialize those lessons learned so that as we
2067 incorporate that into our training going forward so that we
2068 are able to make those improvements.

2069 Mr. Johnson. Okay. All right.

2070 Thank you, Mr. Chairman. I yield back.

2071 Mr. Shimkus. Gentleman's time has expired.

2072 The chair now recognizes Dr. Ruiz from California for
2073 five minutes.

2074 Mr. Ruiz. Thank you, Mr. Chairman.

2075 I want to throw out a compliment to my colleague from
2076 Ohio who just asked those questions. Those are very good
2077 questions, very insightful. Thank you for asking those
2078 questions.

2079 I want to continue on that line in terms of coordination
2080 and some local flexibility problems that I saw when I went to
2081 Puerto Rico myself that was an unscripted visit.

2082 I went on my own accord and I visited a lot of locations
2083 impromptu so I can get the real story and not the script that
2084 folks would like to give you, and I had great assistance when
2085 I was on the ground as well.

2086 And by way of background, I am an emergency medicine

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

102

2087 physician trained in public health and also trained in
2088 humanitarian disaster response from the Harvard Humanitarian
2089 Initiative and other locations.

2090 We talked about coordination. Let me just ask an open-
2091 ended question. Mr. Lopez, who is running the show in Puerto
2092 Rico? Who is -- who is really in charge?

2093 Mr. Lopez. So, understandably, we are under a command
2094 and control structure, as we mentioned. Again, FEMA makes
2095 the mission assignments.

2096 Mr. Ruiz. Okay.

2097 Mr. Lopez. So mission assignments are handed out by
2098 FEMA.

2099 Mr. Ruiz. So you would say FEMA is in charge?

2100 Mr. Lopez. Through our command and control structure.

2101 Mr. Ruiz. Yes.

2102 Mr. Lopez. That -- that is -- again, as we interact we
2103 take mission assignments from FEMA --

2104 Mr. Ruiz. Okay.

2105 Mr. Lopez. -- and we work with our headquarters in our
2106 regional offices for support.

2107 Mr. Ruiz. Okay. And how are you coordinated? Where --
2108 like, how does that information get down to the EPA folks

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

103

2109 that are in the field?

2110 Mr. Lopez. So we have a command and control structure
2111 and in our region we have an incident coordinator.

2112 Mr. Ruiz. Yes, and where is that incident coordinator
2113 located?

2114 Mr. Lopez. He is in Edison, New Jersey. We also have
2115 staff --

2116 Mr. Ruiz. In New Jersey.

2117 Mr. Lopez. -- we also have staff -- and this is --
2118 this is critical for Puerto Rico -- we also have staff
2119 embedded on the island. So --

2120 Mr. Ruiz. Where -- were exactly are they embedded?

2121 Mr. Lopez. Guaynabo.

2122 Mr. Ruiz. Guaynabo.

2123 Mr. Lopez. And also out of San Juan.

2124 Mr. Ruiz. And where else are they embedded? In San
2125 Juan?

2126 Mr. Lopez. San Juan.

2127 Mr. Ruiz. Okay.

2128 Mr. Lopez. So we have staff embedded there. We also
2129 have some staff --

2130 Mr. Ruiz. Okay. So, you know, the point I am making is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

104

2131 that when I was there the number-one thing you need is
2132 clarity in leadership, in roles and responsibilities, and
2133 having to bring in all the -- all the local players, as Mr.
2134 Coleman was talking about, and everybody in a very flexible
2135 rapid response group and I didn't see that in Puerto Rico.

2136 We are using a spoke and hub model that is basically run
2137 out of San Juan. Very top-down heavy information is being
2138 sent out.

2139 All the different agencies are working in silos. They
2140 weren't even communicating with each other. So there is
2141 things like you mentioned, obstacles in being able to reach
2142 certain geographic locations.

2143 I worked with the 82nd Airborne closely in Port-au-
2144 Prince right after Haiti. Those -- those men and women can
2145 move mountains to get supplies anywhere in the world and I
2146 didn't see that kind of coordination on the ground to get
2147 those supplies, to get the people where they needed to go.

2148 So here is what I am proposing, and I am speaking to
2149 every else, is, you know, the challenges of Puerto Rico are
2150 very different than the challenges in Houston and Florida.

2151 You don't have a large concentration of population with
2152 an infrastructure that is intact -- electricity and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

105

2153 communication. You still have the majority of people without
2154 power. You still have the majority of people who have
2155 difficulty finding that clean water. And you say some of the
2156 -- some of the water systems are operational.

2157 What does that mean, operational? Because I have been
2158 into some hospitals they say are operational but that is only
2159 one floor of the five floors of the hospital, but yet people
2160 want to tout them as operational.

2161 So what we need to talk about is capacity and what is
2162 the capacity of the infrastructure to reach how many people.
2163 Oftentimes, gentlemen, we get -- we get the reports of how
2164 many people on the ground, how many water bottles, how many
2165 systems.

2166 But that is not the way that you manage or that you
2167 count accountability in a disaster response. We have to talk
2168 about capacity. So what is the capacity of the different
2169 agencies and the different infrastructure systems to provide
2170 the much-needed services?

2171 And you are right, Mr. Lopez. Agua es vida -- water is
2172 life and so tell me, is there a water task force in Puerto
2173 Rico with different stakeholders and where is that water task
2174 force -- how is that water task force managed and who are the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

106

2175 stakeholders in that task force?

2176 Mr. Lopez. So it is a small group. So we have, again,
2177 FEMA. We have mission assignments. Our offices -- we work
2178 with the EQB -- environmental quality board-- and with the
2179 state health -- excuse me, the territory health department.

2180 So those are the principal actors.

2181 Mr. Ruiz. Okay.

2182 Mr. Lopez. And just, Congressman, if I may, we are on
2183 track on a regular basis. We do regular meetings with the
2184 island -- conference calls and interdiction of --

2185 Mr. Ruiz. Great. My proposal is to have field command
2186 posts with all the different stakeholders to address local
2187 issues with local mayors and NGOs and the Puerto Rican
2188 government, the federal government, and other agencies
2189 working together -- pretty much what Mr. Coleman talked about
2190 that is occurring in other locations but have that in Puerto
2191 Rico more in the field so that you can have better decision
2192 making, coordination, and responding.

2193 Your role is to test and monitor and to track changes.
2194 But then that needs to get translated to actual
2195 implementation in a much more rapid way so that goods and
2196 repairs can be made in a transparent and prioritized way on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

107

2197 the ground.

2198 And so that is -- my time is up -- so that is my -- that
2199 is my recommendation, given my experience and I think that we
2200 need to move forward in trying to implement some of those.

2201 Mr. Shimkus. Thank you, Dr. Ruiz. I agree.

2202 We had a very similar hearing like this on the Energy
2203 Subcommittee and the question I asked, well, who's in charge.

2204 Mr. Ruiz. Yes, and --

2205 Mr. Shimkus. I would have loved for --

2206 Mr. Ruiz. -- and right now we heard FEMA but then when
2207 I was on the ground FEMA said Puerto Rico --

2208 Mr. Shimkus. I -- I --

2209 Mr. Ruiz. -- and Puerto Rico says FEMA.

2210 Mr. Shimkus. I don't disagree and I -- I wish that the
2211 administration would have just parachuted 82nd there --

2212 Mr. Ruiz. I would have loved to have seen that.

2213 Absolutely.

2214 Mr. Shimkus. -- to some of the very small villages and
2215 I think we all would have been better -- best served. Then
2216 we could have worried about who is responsible later. But
2217 you need to get service there immediately.

2218 Mr. Lopez. Chairman, if I -- just briefly, too. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

108

2219 not last but not least, there is a joint field operations
2220 center there and we do have EPA incident commanders and we
2221 have branch leaders in Puerto Rico.

2222 So there is an incident command center there. Those
2223 other agencies are embedded but --

2224 Mr. Ruiz. See, when you say that, though, Puerto Rico
2225 is big, you know, and you leave us with the impression that
2226 it is somewhere.

2227 But where exactly, and are they in the different
2228 municipalities and do we have the right people working in a
2229 group out in the field in those different municipalities,
2230 because when I was there they didn't exist.

2231 FEMA told me they didn't have field command posts. DMAT
2232 did not have field command posts. I spoke to different
2233 agencies that did not -- they said that this would be a good
2234 idea and something that they would be very willing to work
2235 with and actually I am meeting with HHS later today to
2236 address this concept.

2237 Mr. Shimkus. Great. Thank you. Thank you very much.

2238 The chair now recognizes the gentleman from Texas, Mr.
2239 Flores, for five minutes.

2240 Mr. Flores. Speaking of HHS, that is going to be my

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

109

2241 question.

2242 I want to thank the chairman and ranking member for the
2243 -- for holding this hearing. I want to thank the panel for
2244 joining us today.

2245 Under Emergency Support Function Number 8, the
2246 Department of Health and Human Services, or HHS as it is
2247 commonly called around here, is the primary agency for ESF
2248 Number 8 and includes support for potable drinking water,
2249 solid waste disposal, and other environmental issues related
2250 to public health.

2251 I have got a question -- this question for Mr. Lopez and
2252 Mr. Coleman, starting with Mr. Coleman. Number one, have you
2253 worked with HHS to carry out this function regarding
2254 providing potable water and also solid waste and debris
2255 removal in communities affected by hurricane damage this
2256 season.

2257 Mr. Coleman. Yes, sir. We do work with HHS. ~~As~~
2258 ~~s~~Specific to Hurricane Harvey, as the state and FEMA
2259 determined the specific federal assistance that is necessary.
2260 In this particular response, that role of HHS was somewhat
2261 limited because of ~~of~~, A, the state capacity was quite extensive
2262 and we had done a lot of coordination work with them, but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

110

2263 embedded with my staff I have three members from the Centers
2264 for Disease Control and they coordinate and have reach back
2265 capability to both the CDC headquarters and HHS in general as
2266 any issue comes up and we are able to quickly address those
2267 and provide the support as requested by the state.

2268 Mr. Flores. Okay. Thank you, Mr. Coleman.

2269 Mr. Lopez, do you have anything to add regarding --

2270 Mr. Lopez. The only thing I would say, again, is that
2271 HHS is part of the unified command structure so that they are
2272 immersed in that conversation.

2273 Our local engagement has been with the Puerto Rico
2274 Department of Health. So, ultimately, we do have the
2275 representation of health interests.

2276 Mr. Flores. Okay.

2277 Mr. Glenn, do you have anything to add?

2278 Mr. Glenn. No, sir. It's part of that structure and we
2279 have been working with them.

2280 Mr. Flores. Okay.

2281 Mr. Shaw, you gave us a breakdown of TCEQ's costs for
2282 dealing with the hurricane response and you indicated that
2283 the funds to reimburse you would be coming from FEMA. Has
2284 FEMA been a good partner in working with the state of Texas

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

111

2285 and dealing with the response and recovery efforts?

2286 Mr. Shaw. Yes, and there is sort of various aspects of
2287 how that operates. We have, in the initial public assistance
2288 reimbursement from FEMA, about \$700,000 anticipated for that
2289 cost and that is the initial travel and what have you,
2290 working with the initial response.

2291 We also have a \$15 million authorization from FEMA for
2292 us to work with EPA in dealing with the field operations,
2293 which includes a lot of our command and control -- our
2294 assessment and location of containers displaced and what have
2295 you in the field operations.

2296 So \$700,000 for the initial component and \$15 million to
2297 work with EPA on those field operations.

2298 Mr. Flores. Okay. What can be improved upon in terms
2299 of that process? It sounds to me like it has worked pretty
2300 smoothly. Do you have any suggestions for improvement?

2301 Mr. Shaw. It is working well. Communications is the
2302 primary issue and we have a lot of lessons learned. So yes,
2303 I think we will learn more but I think the key thing is to
2304 point out one of the issues, for example, are lessons
2305 learned. We work very closely with EPA. In this event, we
2306 were able to very quickly deal with things such as fuel

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

112

2307 waivers that took weeks in past events and took hours in this
2308 event and that allowed us to focus on those critical issues,
2309 making sure we got water, wastewater, and immediate harm
2310 issues addressed quickly.

2311 Mr. Flores. Okay. In this process, have you come
2312 across anything where Congress can help in terms of making
2313 statutory improvements to the Stafford Act or any other
2314 related federal statutes to deal with catastrophes like this?

2315 Mr. Shaw. There are -- there is room for improvement
2316 and the challenges, quite frankly, Congressman, are going to
2317 be those tradeoffs because, you know, as you look at -- and
2318 this is sort of outside of my lane -- but one example is
2319 dealing with the repairs on the recovery side of that to
2320 homes, for example, and I think there's opportunities to be
2321 able to get that done much more quickly and to do permanent
2322 repairs as opposed to something that is temporary.

2323 The reason that I am interested in that is because
2324 getting those folks back into their homes has such a huge
2325 health and environmental impact because the longer it takes
2326 to get those homes repaired the longer you have those health
2327 issues associated with debris with people that are outside or
2328 displaced from their housing and then the economics

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

113

2329 associated with all those.

2330 So there are room for improvement. A lot of those have
2331 to do with making sure that Congress is making the types of
2332 decisions about how to improve the efficiency of getting
2333 those repairs done as well as making sure that they're
2334 ensuring that those funds are expended properly and you avoid
2335 -- there is going to be foul play involved and that becomes a
2336 huge issue as how much you balance, making sure you get the
2337 funds out there but you minimize the money that is
2338 fraudulently spent.

2339 Mr. Flores. Okay.

2340 Thank you for your responses. Again, I thank the panel
2341 for joining us. I yield back the balance of my time.

2342 Mr. Shimkus. Gentleman yields back.

2343 The chair now recognizes the gentlelady from Colorado,
2344 Ms. DeGette, for five minutes.

2345 Ms. DeGette. Thank you so much, Mr. Chairman, and
2346 thanks to the witnesses for coming.

2347 Mr. Glenn, before Hurricane Irma, you and the other
2348 leaders in Region 4 increased staffing of the Regional
2349 Emergency Operations Center, the deployed on-scene
2350 coordinators to the state emergency operations center, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

114

2351 you provided a Region 4 liaison to the FEMA Regional
2352 Coordination Center. Is that right?

2353 Mr. Glenn. Yes, ma'am.

2354 Ms. DeGette. And do you -- can you estimate how many
2355 senior leaders were deployed prior to the hurricane's
2356 landfall?

2357 Mr. Glenn. Prior to the landfall, as far as our
2358 executive leadership, I, myself, went down and we had two
2359 other senior leaders that worked directly for me went to
2360 south Florida, and then some individuals from headquarters
2361 were also down in Florida.

2362 Ms. DeGette. Okay. Were you the most senior person
2363 down there before landfall or was there someone more senior
2364 to you?

2365 Mr. Glenn. Prior to landfall, I was the most senior
2366 person in the Region 4 down there.

2367 Ms. DeGette. Okay. And, you know, it is like Mr.
2368 Coleman was saying, there was a lot of coordination with the
2369 state and local officials down there. Is that right?

2370 Mr. Glenn. Absolutely. Yes, ma'am.

2371 Ms. DeGette. So, Mr. Lopez, I want to -- I know you
2372 didn't arrive on the scene until September 28th but I want to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

115

2373 ask you the same question, if you know.

2374 Before Hurricane Irma hit Puerto Rico, did the leaders
2375 in Region 2 increase staffing in the Regional Emergency
2376 Operations Center?

2377 Mr. Lopez. So, again, I started actually on October
2378 11th.

2379 Ms. DeGette. Oh, okay.

2380 Mr. Lopez. But --

2381 Ms. DeGette. So do you -- do you know what kind of
2382 staffing was increased?

2383 Mr. Lopez. I would have to -- I would have to get back
2384 with you for detail.

2385 Ms. DeGette. Okay.

2386 Mr. Lopez. I have some assessments but I don't want to
2387 be inappropriate with a response. So I'd be happy to
2388 respond.

2389 Ms. DeGette. Okay. And so the questions -- you'll
2390 probably need to get back to me on the staffing, the onsite
2391 coordinators, and who the senior leaders were who were there
2392 prior to landfall.

2393 The anecdotal evidence that we have is that whereas in
2394 Region 4 they were all there before it hit, in Region 2 what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

116

2395 happened was they were all rushed -- aside from the people
2396 who were already embedded there that you testified about
2397 before that we were already behind the curve because we had
2398 to send a lot of people in. So if you can get me that
2399 information that would be really helpful.

2400 And I want to ask you again -- to continue, Mr. Glenn,
2401 now, on September 12th there were 12 field hazard assessment
2402 teams conducting facility assessment support at chemical and
2403 oil storage facilities. Is that right?

2404 Mr. Glenn. Yes, ma'am.

2405 Ms. DeGette. Now, Mr. Lopez, do you know how many field
2406 assessment -- field hazard assessment teams were operating in
2407 Puerto and the U.S. Virgin Islands two days after Irma made
2408 landfall?

2409 Mr. Glenn. I can't tell you the number of teams but I
2410 can tell you that teams were on the ground so --

2411 Ms. DeGette. You don't -- can you get me that answer,
2412 please, of the number?

2413 Mr. Lopez. I can get you the number, of course.

2414 Ms. DeGette. And how about Maria? Same thing?

2415 Mr. Lopez. I will have to get you the same thing.

2416 Again, the sites --

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

117

2417 Ms. DeGette. Okay.

2418 Mr. Lopez. -- as I mentioned in my testimony, were
2419 assessed prior and afterwards. So there have been
2420 assessments ongoing. But I can't tell you the number.

2421 Ms. DeGette. Right.

2422 But, again, you know, in Region 4 they had 12 teams on
2423 the ground two days after. So what I want to know, and as
2424 several of my colleagues on both sides of the aisle have
2425 said, is Puerto Rico is a lot larger physically and more
2426 complex because of transportation needs and other issues.

2427 So I am just wondering two days after landfall in Puerto
2428 Rico and the U.S. Virgin Islands how many teams did we have
2429 and what were they doing.

2430 Now, Mr. Lopez, I bet you can't answer this either.

2431 Mr. Lopez. I will do my best, ma'am.

2432 Ms. DeGette. Do you know how many teams did Region 2
2433 have in making boots on the ground assessments of Superfund
2434 sites two days afterwards -- after Irma?

2435 Mr. Lopez. As I mentioned, the --

2436 Ms. DeGette. If you can get me that information, too.

2437 Mr. Lopez. We will get you the specific numbers.

2438 Ms. DeGette. Sure.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

118

2439 Mr. Lopez. But just to be clear, Congresswoman, there
2440 was a presence --

2441 Ms. DeGette. Uh-huh.

2442 Mr. Lopez. -- and folks were on the ground assessing
2443 before and after.

2444 Ms. DeGette. I am certainly not trying to imply there
2445 was no presence.

2446 Mr. Lopez. I understand. I just don't have the correct
2447 number.

2448 Ms. DeGette. But like Mr. Glenn -- correct me if I am
2449 wrong -- Region 4 had six teams on the ground on September
2450 12th that were making boots on the ground assessment of
2451 Superfund sites. Is that right, Mr. Glenn?

2452 Mr. Glenn. Yes, ma'am.

2453 Ms. DeGette. So that is what I am wondering, Mr. Lopez,
2454 and, frankly, I am a little concerned that you don't know. I
2455 realize you didn't come in until October. But we need to
2456 know how robust and how quick the response was and the very
2457 fact that we are having this hearing, Mr. Chairman, and they
2458 can't answer any of these questions for Region 2 -- Region 4
2459 has it Johnny-on-the-spot -- just goes to the concern that we
2460 are all -- that we are all expressing today and if I can get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

119

2461 your answers maybe --

2462 Mr. Lopez. Sure.

2463 Ms. DeGette. -- maybe my concerns will be alleviated.

2464 But I fear that they will not.

2465 Thank you. I yield back.

2466 Mr. Shimkus. The gentlelady yields back her time and I
2467 thank her for those questions. It just goes to my point of a
2468 standard operating procedure and why are regions different
2469 when there is a disaster heading in a certain area.

2470 Ms. DeGette. Why is it one thing in one region and
2471 another thing in another region?

2472 Mr. Shimkus. Right. So thank you very much.

2473 The chair recognizes the gentleman from North Carolina,
2474 Mr. Hudson, for five minutes.

2475 Mr. Hudson. Thank you, Mr. Chairman, and thank you to
2476 all the witnesses for being here today.

2477 Mr. Glenn, I particularly want to say welcome to you.
2478 Obviously, Region 4 includes my home state of North Carolina.
2479 I look forward to getting to know you better and working with
2480 you in the future.

2481 While the damage in Puerto Rico and the U.S. Virgin
2482 Islands is significant, Region 4, including Florida,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

120

2483 sustained substantial damage from Hurricane Irma on the heels
2484 of rebuilding after the 2016 hurricane season.

2485 There were several reports after Hurricane Irma of
2486 issues with drinking water systems and several communities
2487 under boiled water advisories.

2488 What is the status, Mr. Glenn, of drinking water systems
2489 in Region 4? Are there still people without access to safe
2490 drinking water?

2491 Mr. Glenn. The information I have is that all drinking
2492 water systems are operational in Region 4. We are not aware
2493 of any people served by a system that are without access to
2494 potable drinking water.

2495 Mr. Hudson. Great. What about right after the storm?
2496 How did the drinking systems fare during the hurricane?

2497 Mr. Glenn. Well, as you know, any time a storm like
2498 this comes through it has impacts. It has immediate impacts,
2499 and so almost every municipality that was in the path of the
2500 storm did experience some type of impact at varying levels.

2501 The impact you've heard today -- physical damage, power
2502 outages, personnel, chemical supply interruptions, and the
2503 like -- so almost every system was impacted and --

2504 Mr. Hudson. In terms of water systems -- drinking

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

121

2505 systems?

2506 Mr. Glenn. Yes, sir. Drinking systems. Correct.

2507 Mr. Hudson. Well, just on your assessment, are there
2508 any improvements to the drinking water systems that we could
2509 look at to help in future situations like this?

2510 Mr. Glenn. Well, as you know, we operate under the
2511 permission authority of the Stafford Act and we will continue
2512 to do so and fulfill whatever authorizations are provided for
2513 in that act.

2514 Mr. Hudson. Got you.

2515 For everybody, the whole panel, in June 2016 the
2516 National Infrastructure Advisory Councils recommended FEMA
2517 consolidate federal emergency response roles and
2518 responsibilities for water into a single ESF within the annex
2519 of the national response framework to improve coordination
2520 and reduce confusion and improve the information sharing and
2521 communication.

2522 The 2016 recommendation repeats an NAIC recommendation
2523 from 2009 that declared DHS should elevate water services to
2524 its own ESF within the NRF to achieve higher prioritization
2525 of water systems during emergency response that opens up to
2526 at least everyone from FEMA.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

122

2527 And Dr. Shaw, you're welcome to join in too, but do you
2528 believe making this change is a wise move? I would just ask
2529 the FEMA regional folks to chime in.

2530 Mr. Coleman. So with regards to that recommendation,
2531 we think that, and my personal experience is that, water
2532 infrastructure is extraordinarily important. It essentially
2533 sets the basis for when people can repopulate an area.

2534 So, you know, I think it is very important. I don't
2535 have a specific opinion on if it should be its own emergency
2536 support function but I think that working very closely with
2537 the state governor's office, et cetera, to make sure that in
2538 a response you restore service as soon as possible is the
2539 most important thing.

2540 Mr. Hudson. So you don't -- you don't want to say
2541 whether making its own ESF would help with that coordination?

2542 Mr. Coleman. I actually -- from my personal experience
2543 the coordination with the governor's office and the local
2544 officials is the most important coordination that needs to
2545 take place and when that takes place you're able to actually
2546 get the right equipment, infrastructure, or support to bring
2547 those systems back online.

2548 Mr. Hudson. Got you.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

123

2549 Dr. Shaw, I see you are chomping at the bit. Please.

2550 Mr. Shaw. And I am going to be supporting what Mr.

2551 Coleman said as well and that is that I think the key point

2552 is in my state it may be difficult for me to assess whether

2553 that -- what that need would change because we have such a

2554 focus on water and wastewater as our initial response in

2555 that.

2556 I am thinking back through the days before, during, and

2557 after the landfall and I don't -- I have not identified the

2558 place where that would have changed things because we work

2559 cooperatively and our mission is first and foremost to get

2560 out and assess those issues that are immediate harm and key

2561 among those are water and wastewater systems and getting

2562 those back online.

2563 We have partners such as with Texas -- I always get this

2564 wrong -- the Texas American Waterworks Association -- our

2565 TXWARN system which helps us to bring together different

2566 resources from different services that are available to get

2567 equipment in places. Those things are all working very well.

2568 And so my only concern with changes is making sure we don't

2569 lose what's working well because it is working well in the

2570 state of Texas. Obviously, you want it quicker, but those

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

124

2571 are tweaks as opposed to major overhauls.

2572 Mr. Hudson. Got you.

2573 I have got a little over 10 seconds. Do either -- Lopez
2574 or Glenn, do you have an alternate opinion?

2575 Mr. Lopez. Just to reinforce, I was a local official
2576 and I was also on the ground during Irene and Lee. The issue
2577 of communication is really the critical issue.

2578 So whether it is a single function or a coordinated
2579 function, you really need to be in the heads of the plant
2580 operators who know exactly what they need and how to get up
2581 and running. So if you can penetrate to that level quickly,
2582 that is really what you need.

2583 Mr. Hudson. Great.

2584 Mr. Chairman, my time has expired. I will yield back.
2585 Thank you.

2586 Mr. Shimkus. The gentleman yields back his time.

2587 We want to thank this panel. You can tell -- we know
2588 you've travelled far and there is still a lot of work to do
2589 and so we are very appreciative of your efforts.

2590 And there are some members who have asked questions for
2591 you to respond. If you can do so in a timely manner, that
2592 would also be appreciated. Thank you for what you do and now

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

125

2593 go back to your regions and get to work.

2594 And with that, we will dismiss this panel and ask for
2595 the second panel to join.

2596 Okay. Vámanos. Let us go. You Texas Aggies, get out
2597 of the hearing room.

2598 [Laughter.]

2599 Olson, let's go. Hallway.

2600 Okay. We want to thank all our witnesses for being here
2601 today, taking the time to testify before the subcommittee.

2602 Our second witness panel for today's hearing includes Mr.
2603 Mike Howe, executive director and secretary treasurer for the
2604 Texas Section of American Waterworks Association; Mr. Mark
2605 Lichtenstein, chief of staff, chief sustainability officer,
2606 State University of New York, College on Environment Science
2607 and Forestry; Ms. Lyvia N. Rodríguez del Valle, executive
2608 director of Corporacion del Proyecto ENLACE del Caño Martín
2609 Peña; and Mr. Trent Epperson, assistant city manager
2610 administration, City of Pearland.

2611 So you were able to be here for the -- obviously, the
2612 first panel. This will be a smaller group but still as
2613 important as we get your statements into the record.

2614 There will be some of us who will be here to ask the

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

126

2615 questions, as you saw in the first panel. We do appreciate
2616 you being here and with that we will start with Mr. Howe.
2617 You are recognized for five minutes and your full statement
2618 is submitted for the record.
2619 You are recognized, sir.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

127

2620 STATEMENTS OF MIKE HOWE, EXECUTIVE DIRECTOR, TEXAS SECTION OF
2621 AMERICAN WATER WORKS ASSOCIATION, ON BEHALF OF AMERICAN WATER
2622 WORKS ASSOCIATION; MARK LICHTENSTEIN, CHIEF OF STAFF AND
2623 CHIEF SUSTAINABILITY OFFICER, SUNY COLLEGE OF ENVIRONMENTAL
2624 SCIENCE AND FORESTRY; LYVIA N. RODRÍGUEZ DEL VALLE, EXECUTIVE
2625 DIRECTOR, CORPORACIÓN DEL PROYECTO ENLACE DEL CAÑO MARTÍN
2626 PEÑA; TRENT EPPERSON, ASSISTANT CITY MANAGER, CITY OF
2627 PEARLAND, TX

2628

2629 STATEMENT OF MR. HOWE

2630 Mr. Howe. Thank you much and good afternoon, Chairman
2631 Shimkus and members of the subcommittee.

2632 My name is Mike Howe, the executive director of the
2633 Texas Section AWWA and we manage the Texas Water/Wastewater
2634 Agency Response Network, or TXWARN.

2635 The mission of TXWARN is to provide emergency
2636 preparedness disaster response and mutual aid assistance for
2637 water and wastewater utilities. TXWARN began after Hurricane
2638 Katrina when it was apparent that the coordination and
2639 prioritization of water utility needs was disjointed under
2640 the existing national response framework.

2641 We in the water sector realized that we needed to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

128

2642 develop a utility-to-utility mutual aid system. AWWA
2643 spearheaded the WARN initiative and collaborated with other
2644 stakeholders to facilitate the growth of WARN from the two-
2645 state program in 2006 to the 50 programs we have nationwide
2646 today.

2647 Membership in TXWARN is free and is available to all
2648 public and private utilities in Texas, making it the largest
2649 utility-to-utility mutual aid program in the country with
2650 more than 1,200 utility members that provide services to 78
2651 percent of the population of the state of Texas.

2652 The Texas Section AWWA manages TXWARN and receives
2653 partial funding from the TCEQ via the state revolving fund
2654 program to facilitate training and exercises.

2655 Hurricane Harvey made landfall as a Category 4 hurricane
2656 in Nueces and Aransas Counties on August 25th and, as you
2657 know, meandered to the northeast over the upper Texas coast
2658 for four days.

2659 It presented water utilities with unique challenges. As
2660 the storm approached, we activated the TXWARN system on
2661 October -- August 23rd. We first began preparing support
2662 teams for the inevitable aid requests.

2663 Ground zero for Hurricane Harvey was the small coastal

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

129

2664 town of Port Aransas. At daylight after the storm the local
2665 water utility manager assessed the damage to the community
2666 and the water system.

2667 The power was out for the water pumps, one of the water
2668 supply lines from Corpus Christi was out of service, and the
2669 majority of the community's water systems were leaking.

2670 As Harvey crossed Aransas Bay, it brought significant
2671 similar damage to Rockport's water and wastewater system.
2672 The first major request for TXWARN came early Sunday morning
2673 on behalf of Port Aransas. The water system had to be
2674 operational before authorities could bring the population
2675 back.

2676 TXWARN contacted the San Antonio Water System, or SAWS,
2677 a little more than two hours away from Port Aransas and its
2678 management agreed to send equipment and manpower to Port
2679 Aransas. In less than 24 hours, SAWS had deployed 20 field
2680 staff and by Friday of that week they had completely restored
2681 service.

2682 SAWS also responded to Rockport, performing repairs to
2683 its water and wastewater systems. TXWARN arranged to relieve
2684 SAWS crews after 10 days from this grueling work with crews
2685 from the Austin water utility.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

130

2686 During the nearly two-week response period TXWARN was
2687 full activated, we managed more than 50 similar requests for
2688 large and small systems. We are very pleased with our
2689 response operations during Harvey but there is always room
2690 for improvement.

2691 Specifically, I would like to call your attention to how
2692 the needs of the water sector are prioritized and coordinated
2693 as part of the national response framework, or NRF.

2694 The current organizational structure of the NRF largely
2695 reflects the 1992 federal response plan prepared by FEMA.
2696 That was 25 years ago. The experiences of the water sector
2697 since then suggest that this current model requires a
2698 thorough review and update.

2699 The loss of drinking water and wastewater services
2700 compounds the complexities of all response activities and
2701 impacts the ability of first responders to sustain shelters,
2702 hospitals, and other first responding units.

2703 Therefore, prioritizing the recovery of water and
2704 wastewater service is essential to bringing normalcy and
2705 commerce back to any community.

2706 The disaggregated approach under the national response
2707 framework means that no single entity at the federal level

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

131

2708 has total responsibility for the water mission. This is our
2709 issue, and others at the federal level has also recognized
2710 this.

2711 In 2009, the National Infrastructure Advisory Council
2712 recommended the Department of Homeland Security elevate water
2713 services to its own ESF category within the national response
2714 framework.

2715 Seven years later, the NAIC recommended that DHS direct
2716 FEMA to consolidate federal emergency response roles and
2717 responsibility into a single ESF.

2718 Implementing these recommendations will be consistent
2719 with the approaches applied for similar critical
2720 infrastructure such as transportation, communications, and
2721 energy.

2722 We urge Congress with its oversight jurisdiction and
2723 responsibilities to direct FEMA to reconsider how the NRF is
2724 used to support disaster response and recovery. This is
2725 vital for protecting public health, the environment, and all
2726 the communities we serve.

2727 And thank you very much. [The prepared statement of Mr.
2728 Howe follows:]

2729

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

132

2730

*****INSERT 5*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

133

2731 Mr. Shimkus. Thank you, sir.

2732 And now I would like to recognize Mr. Mark Lichtenstein
2733 from the State University of New York. You are recognized
2734 for five minutes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

134

2735 STATEMENT OF MR. LICHTENSTEIN

2736

2737 Mr. Lichtenstein. You pronounce my name better than I
2738 do. Thank you.

2739 Chair Shimkus, Chair Walden, Ranking Members Tonko and
2740 Pallone, and honorable subcommittee members, thank you for
2741 the opportunity to participate.

2742 Having just returned from Puerto Rico and the Virgin
2743 Islands, I have many observations and concerns. But today I
2744 am only going to focus on disaster debris.

2745 I have more than three decades of waste management
2746 experience including with disasters. I am employed by the
2747 State University of New York College of Environmental Science
2748 and Forestry -- ESF -- in Syracuse. It is a different ESF
2749 than we have been talking about.

2750 As immediate past president of the National Recycling
2751 Coalition, I helped create a task force on sustainable
2752 disaster debris management immediately after Harvey.

2753 I have helped address issues in the island since 2009,
2754 working with colleagues like my partners to the left, and I
2755 am a member of the board for Island Green, a U.S. Virgin
2756 Islands nonprofit.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

135

2757 I have been working with local people to devise a
2758 sustainable approach for the storm debris. Some U.S.
2759 government responders are appreciated.

2760 However, there is concern from some residents and other
2761 experts regarding the potential ecological and human health
2762 impacts of a disaster debris management method of choice of
2763 the Army Corps of Engineers -- air curtain incineration.

2764 ACI is a past practice of FEMA and the Corps in these
2765 situations and they have proposed it for the Virgin Islands
2766 and possibly Puerto Rico as well.

2767 This would add insult to injury, especially considering
2768 that much of the debris is clean vegetation. There are
2769 better ways.

2770 During Superstorm Sandy in New York City, the Corps
2771 planned to use ACIs continuously for four months but they
2772 stopped after one month because they could not get them to
2773 function properly.

2774 Air quality was exceeded during days of high humidity
2775 and this was November in New York City. Humidity is
2776 routinely extremely high on the islands. Local people and
2777 others are concerned that ACIs will emit pollutants that
2778 could cause pulmonary aggravation, particularly for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

136

2779 individuals with asthma or cardiac diseases.

2780 Diesel and gasoline generators, which you have heard
2781 about already today, and exposure to indoor mold are already
2782 aggravating existing respiratory conditions.

2783 If burning moves forward in any manner, appropriate
2784 agencies should be asked to address potential health issues,
2785 especially regarding existing conditions. The agency for
2786 toxic substances and disease registries should be requested
2787 to do a review of the health impacts of burning before it
2788 commences. EPA should be asked to establish air monitors
2789 downwind of the burners and burning should not commence until
2790 monitors are established and EPA immediately shares results
2791 with the public.

2792 Much of the topsoil has been lost through storm water.
2793 They have been hammered with rain since the hurricanes. So
2794 it is critical that the vegetative debris remain to help
2795 replenish the soil that the plants of the islands need.

2796 When considering options like burning, it is essential
2797 to incorporate externality costs -- costs for which it is
2798 hard to calculate an immediate number like climate change,
2799 the impacts of depleted soils on the ecosystem, or health
2800 effects of air pollution.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

137

2801 These impacts can be reduced through other viable
2802 options and this is one reason groups like the National
2803 Recycling Coalition have opposed ACIs.

2804 FEMA and the Corps have said they will take the
2805 governor's lead. Many in the Virgin Islands have asked their
2806 governor to oppose incineration. Experts from Puerto Rico,
2807 the Virgin Islands, and stateside have worked to develop a
2808 viable alternative including recovery of hardwood and then
2809 mulching and composting. This all could be done safely and
2810 efficiently.

2811 Composting is a process that nature has perfected over
2812 millions of years. It has been successful in many locations
2813 at large scales and with other disasters like Superstorm
2814 Sandy.

2815 Puerto Rico officials are working towards a similar
2816 sustainable plan. Providing a valid option to incineration
2817 can serve as a positive framework for other disaster-impacted
2818 areas in the future and that is key, and it represents a new
2819 sustainable scheme for debris and waste on the islands, going
2820 forward.

2821 This is a once and done opportunity to get a leg up on
2822 acquiring the infrastructure needed for management of the

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

138

2823 island's long-term organic waste problem, which is about 50
2824 percent of the island's normal waste stream. This gets to
2825 the questions about landfills earlier.

2826 To help this sustainable option move forward, assistance
2827 could come in the form of a waiver of the matching funds
2828 requirement for the next 18 months while the islands build
2829 towards this more resilient and future-focused
2830 infrastructure.

2831 Right now, FEMA is requiring the debris management
2832 solution to be fully implemented in 180 days and this is
2833 considered unrealistic for composting or burning.

2834 The residents and visitors of Puerto Rico and the Virgin
2835 Islands deserve our focused attention. They deserve clean
2836 air and a healthy ecosystem.

2837 The hurricanes were certainly not desired, but this is a
2838 great opportunity to build a more resilient and sustainable
2839 future so that the islands can come back better than before.

2840 Thank you on behalf of my institution, ESF, and SUNY,
2841 and we stand ready to assist the subcommittee as it continues
2842 its work.

2843 [The prepared statement of Mr. Lichtenstein follows:]

2844

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

139

2845

*****INSERT 6*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

140

2846 Mr. Shimkus. Thank you very much.

2847 Next, we would like to turn to -- I don't know if it is

2848 Señora or Señorita. Señor? Rodríguez del Valle.

2849 You are recognized for five minutes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

141

2850 STATEMENT OF MS. RODRÍGUEZ

2851

2852 Ms. Rodríguez. A disaster within a disaster --

2853 Mr. Shimkus. One moment, please. There is a -- just
2854 press a button there. You'll be fine.

2855 Ms. Rodríguez. Thank you. I will start again.

2856 A disaster within a disaster -- that is what the eight
2857 densely-populated communities on the Caño Martín Peña and
2858 others that were already under environment distress prior to
2859 Irma and Maria have been experiencing since the hurricane
2860 struck.

2861 The 25,000 U.S. citizens living on the eastern half of
2862 the Martín Peña tidal channel already feared rain. They knew
2863 about flooding. An average of twice a year heavy rainfall
2864 translated into severe floods with wastewater.

2865 Accounts of raw sewage coming out of the shower and
2866 toilets or of waking up in the middle of the night to a wet
2867 bed and water to your knees and waste were common.

2868 They knew having to dry a wet mattress in the sun to
2869 have somewhere to lay down to sleep at night. They also knew
2870 disease. The prevalence of gastrointestinal disease in the
2871 Cano was of 31 percent in three months, compared to 20

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

142

2872 percent in a full year for Puerto Rico.

2873 Forty-four percent of the children five years of age and
2874 under living close to the Caño had asthma. People had
2875 experienced the dengue fever, zika, and chikungunya
2876 epidemics. There have been reports of leptospirosis, a
2877 disease transmitted mainly by contact with the urine of rats
2878 and other animals and which can be fatal.

2879 The Martín Peña channel stretches for 3.7 miles across
2880 San Juan, connecting San Juan Bay, where Puerto Rico's
2881 busiest port is, to the inland San Jose Lagoon to the east,
2882 vital for the stormwater management of the adjacent Luis
2883 Muñoz Marín International Airport. It is part of the San
2884 Juan Bay, recognized by the EPA for its national
2885 significance.

2886 From a 200- to 400-foot wide navigable channel, today it
2887 is barely five feet wide in some areas. Adjacent communities
2888 lack sewer systems and the stormwater system has collapsed.
2889 The San Jose Lagoon has lost superficial area and depth,
2890 increasing the risk of floods at the airport and other
2891 communities throughout San Juan.

2892 If historic -- if history were to repeat itself, almost
2893 a century ago after two major hurricanes and in the midst of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

143

2894 an economic depression, persons migrated to San Juan and the
2895 wetlands around the Caño became home.

2896 Prior to Maria, the barrios which survived decades of
2897 eviction and gentrification were already a symbol of
2898 resiliency, empowerment, and grass roots organization.

2899 Residents engaged in an unprecedented participatory
2900 planning process that led to the creation of the
2901 comprehensive development ENLACE Caño Martín Peña project.
2902 Since then, together with the public and private sectors,
2903 they moved forward an agenda of long-term resiliency that has
2904 the potential of transforming the city by reconnecting its
2905 navigable bodies of water.

2906 Recovering the Caño with participation means healthier
2907 and safer conditions for the residents without fear of
2908 gentrification thanks to a community land trust recognized
2909 last year with the United Nations World Habitat Award.

2910 And then Irma and Maria struck. Close to 1,000 families
2911 lost totally or partially the roofs to their homes.
2912 Approximately 75 homes were totally destroyed. The
2913 communities experienced another severe flood with raw sewage,
2914 only that this time around it lasted for four days.

2915 Approximately half of the trees along the Caño fell and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

144

2916 together with the debris from the destroyed houses further
2917 blocked the Caño and the storm sewers.

2918 Since Maria, it only takes 15 minutes of rain for floods
2919 to start. It even floods on a sunny day. We already have
2920 had two significant floods in the past two months, which have
2921 been affecting other areas of San Juan as well.

2922 Since Maria, water quality throughout the estuary has
2923 significantly worsened. The disturbance of the Caño and
2924 uncollected debris from streets caused a rat infestation and
2925 augmented the risk of mosquito-borne diseases. Alligators
2926 are approaching people's homes. Tarps and Corps-installed
2927 blue roofs are already in place. However, there is mold and
2928 water filtration.

2929 Fifteen years of organizing allowed for ENLACE, the
2930 grassroots G-8, and the land trust to work with partners and
2931 bring aid. However, the crisis is far from over.

2932 Now, imagine living in a state of never-ending crisis
2933 and trauma -- whole families sleeping on the floor on the
2934 room that does not get wet after sleeping under the rain for
2935 many days in the capital city of Puerto Rico, San Juan.

2936 Using federal recovery funds to support initiatives like
2937 the ENLACE Caño Martín Peña project presents a unique

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

145

2938 opportunity for an emblematic recovery process that increases
2939 Puerto Rico's long-term resiliency and sound economic
2940 development.

2941 Investing in the ecosystem restoration of the Caño
2942 infrastructure and related acquisitions and relocation
2943 supports equitable development and participatory democracy.

2944 There is already a credible and proven institutional and
2945 policy framework in place and engaged community and partners,
2946 shovel-ready projects and NEPA compliance for the ecosystem
2947 restoration piece elaborated under the Water Resources
2948 Development Act of 2007.

2949 Due to the current crisis, the Caño cannot keep waiting
2950 for ordinary processes to occur. At a time of severe
2951 political, economic, fiscal, and financial challenges,
2952 support from the U.S. federal government is crucial.

2953 That is why I urge Congress to pursue the inclusion of
2954 this project and all of its components in any upcoming
2955 disaster recovery bill for Puerto Rico.

2956 This project is necessary and should be a priority due
2957 to serious repercussions in the San Juan Bay Estuary, public
2958 health, and safety.

2959 And finally, I want to stress the importance of ensuring

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

146

2960 that any funding related to Martín Peña or other communities
2961 in a similar situation promote on-site resilient recovery
2962 rather than displacement and gentrification and for
2963 assistance policies to be context sensitive to allow for a
2964 just and equitable disaster recovery.

2965 We are concerned that FEMA individual assistance
2966 programs requiring families in need for housing to leave
2967 outside the flood plain can make families in desperate need
2968 to leave their communities.

2969 When this happens in areas where resilient onsite
2970 alternatives are visible and that have been under pressure of
2971 displacement and gentrification due to their strategic
2972 location, those who have struggled for their lands for
2973 decades can end up being uprooted.

2974 No person should leave fearing the rain and no community
2975 should be displaced when there is an alternative at hand.
2976 With your support, long-term solutions that also keep Puerto
2977 Rico face -- help Puerto Rico face its economic crisis such
2978 as this project will become a reality.

2979 An official visit to Puerto Rico I do invite you to come
2980 and visit the work we've done. Thank you.

2981 [The prepared statement of Ms. Rodríguez follows:]

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

147

2982

2983 *****INSERT 7*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

148

2984 Mr. Shimkus. Thank you very much.

2985 Now I would like to turn to Mr. Epperson. You are

2986 recognized for five minutes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

149

2987 STATEMENT OF MR. EPPERSON

2988

2989 Mr. Epperson. Good afternoon, Chairman, and members of
2990 the subcommittee.

2991 My name is Trent Epperson. I am the assistant city
2992 manager with the city of Pearland in Texas and I am pleased
2993 to be invited here today to present to you the effects of
2994 Hurricane Harvey as it occurred in the city of Pearland,
2995 especially as it relates to critical water and wastewater
2996 infrastructure and the need to make that infrastructure
2997 resilient and redundant.

2998 The city of Pearland is a suburban city of about 120,000
2999 residents just south of the city of Houston. It has been one
3000 of the fastest growing communities in the nation over the
3001 past 15 years.

3002 We have grown from a population of about a little over
3003 30,000 in the year 2000 to today over 120,000 to where we are
3004 the third largest city in the Houston Metro area.

3005 During Hurricane Harvey, with its unprecedented
3006 flooding, Pearland experienced structural flooding affecting
3007 over 1,700 residents, 50 businesses, and flooding to critical
3008 infrastructure including two wastewater treatment plants.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

150

3009 Most of the flooding occurred along Clear Creek, which,
3010 germane to this subcommittee is a 303D-listed impaired water
3011 body for bacteria. With a 500-year storm event, it is -- it
3012 was estimated before this storm that about 7,000 residents in
3013 the Clear Creek watershed would flood. I believe we saw that
3014 or more in Pearland and the downstream communities.

3015 There is, however, a U.S. Army Corps of Engineers
3016 drainage project that has been on the books since the '60s
3017 but yet to be funded.

3018 Based on the studies associated with that project,
3019 approximately half of those residents that flooded in the
3020 watershed would likely have been spared during Hurricane
3021 Harvey.

3022 Additionally, critical infrastructure within the
3023 watershed would not have flooded and failed as well.
3024 Although the city of Pearland has grown rapidly, our new
3025 development and our new infrastructure follows current codes
3026 and standards.

3027 The result was that in those newer areas we experienced
3028 very minimal flooding and that is in areas where we have
3029 added tens of thousands of new rooftops over the past 15
3030 years.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

151

3031 So we see that along with the completion of the Clear
3032 Creek drainage project what is needed is funding for
3033 continued sound investment and resilient and redundant
3034 critical infrastructure, especially to bring the older
3035 infrastructure to current standards.

3036 The most critical of those infrastructure pieces are
3037 water, wastewater, and the automated systems that control
3038 that infrastructure. It is a critical life safety issue for
3039 any city to have the ability to deliver clean safe drinking
3040 water during a disaster.

3041 For Pearland, this critical infrastructure must have
3042 adequate generator power, flood proofing, and adequate
3043 elevation to survive a minimum of a 500-year storm as well as
3044 able to withstand Category 4 hurricane winds.

3045 During Hurricane Harvey, our water system performed very
3046 well with only one water well sustaining minor damage due to
3047 power surging. We never lost pressure and we were always
3048 able to deliver that clean safe drinking water.

3049 Unfortunately, some of our adjoining communities and the
3050 smaller water systems around us were unable to do that and
3051 did have to issue boil water notices.

3052 Additionally, continuity of service in treating

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

152

3053 wastewater is critical for citizens sheltering in place and
3054 the return of evacuees when they return -- when they come
3055 back to their homes.

3056 We must ensure that wastewater is adequately treated and
3057 not released during a flooding event because that can affect
3058 the downstream water quality in our streams and bayous.

3059 In our area, wastewater facilities are often located in
3060 low-lying areas near the stream that they outfall to, making
3061 them vulnerable to flooding, and therefore a lot of them are
3062 in need of the same resiliency and redundancy criteria
3063 applied to our drinking water facilities.

3064 During Harvey, unfortunately our wastewater system did
3065 not fare near as well as our wastewater system. Our Longwood
3066 wastewater treatment plant, which was originally built in the
3067 1960s and is sited in one of the old oxbows of Clear Creek,
3068 was inundated with flood waters and inoperable for up to 72
3069 hours during the event. The estimated damage to the plant is
3070 about a million and a half dollars.

3071 But due to the proximity of the plant to the creek,
3072 instead of making those expensive repairs on a plant that is
3073 vulnerable to the next flood, this facility should have its
3074 flows redirected to an adequate plant to mitigate any future

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

153

3075 damage or loss of service.

3076 One final critical piece of infrastructure to our
3077 utility operations is the Supervisory Control and Data
3078 Acquisition System, or SCADA.

3079 What SCADA is is it is basically a system that allows us
3080 to monitor and control our critical water and wastewater
3081 facilities remotely.

3082 These systems must be redundant and resilient to provide
3083 continuous connectivity to those facilities throughout an
3084 emergency event.

3085 SCADA is indispensable to ensure the plants and the lift
3086 stations are operational and properly functioning when we
3087 cannot reach those facilities due to high water or debris.

3088 During Hurricane Harvey, for three days we could not
3089 physically access 18 wastewater lift stations which are
3090 critical to getting the wastewater to the plants. Due to a
3091 lack of SCADA redundancy, we were also unable to monitor many
3092 of these facilities remotely.

3093 The city of Pearland, although challenged, fared
3094 relatively well through Hurricane Harvey and will recover
3095 stronger than we were before the disaster.

3096 As we rebuild, we look to ensure our critical

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

154

3097 infrastructure is able to withstand flooding, high winds, and
3098 other potential disasters.

3099 To do this, we must have adequate recovery and
3100 mitigation funding available so that we do not just rebuild
3101 our critical infrastructure to its original state but we
3102 rebuild resilient redundant infrastructure ready for the next
3103 disaster.

3104 Thank you, Mr. Chairman.

3105 [The prepared statement of Mr. Epperson follows:]

3106

3107 *****INSERT 8*****

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

155

3108 Mr. Shimkus. Thank you very much. I appreciate the
3109 opening statements. I want to start by then recognizing
3110 myself for five minutes for a round of questioning.

3111 And I have some here prepared in front of me but I
3112 really want to go off script a little bit, and if you would
3113 hit the time, too, Jerry.

3114 The -- you sat in on our -- the first panel, which was
3115 long with a lot of extensive questioning and I think there
3116 was a consensus by my colleagues on both sides that maybe we
3117 are just not organized right and I think it addresses all
3118 three of your kind of positions because, one, it deals with,
3119 you know, the debris management issue, who makes the decision
3120 and for what purposes.

3121 Obviously, the estuary and the river systems, but we
3122 also want to make sure that if we go in this direction how do
3123 we not -- it was mentioned in the first panel -- how do we
3124 not stumble on them having a centralized government get
3125 involved in things that are working, right.

3126 So let me -- let me go and turn to each one of you and,
3127 Mr. Howe, my questions were going to be -- going to be
3128 totally directed to you but I really would like everyone's
3129 response because this is kind of similar to the energy

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

156

3130 hearing where in some places there is mutual agreements and
3131 when you have states or local service areas you can
3132 coordinate and you can send folks to. Obviously, islands
3133 much more difficult, as we saw with the Energy Subcommittee.

3134 So what would be a structure by which -- I think your
3135 testimony was there are things that are working -- be careful
3136 not to screw those up if there was a change in the -- in
3137 essence, a change of the Stafford Act in some delineation of
3138 responsibility.

3139 Mr. Howe. In speaking to what I spoke in my remarks on
3140 the written testimony, also the issue of the multiple ESFs
3141 that water is under.

3142 Now, for lack of a better term, under the WARN program
3143 across the country we have done a workaround. The WARN
3144 programs are utilities supporting utilities and most of those
3145 programs are operated independently of the state regulatory
3146 agency or the state operation center, even though as you saw
3147 from Mr. Shaw earlier we cooperate with them directly.

3148 We are partially funded and we are unique to this, by
3149 the way. The Texas -- the TXWARN program is partially funded
3150 by the TCEQ. So we work very closely with them and the state
3151 operations center.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

157

3152 But we have identified an issue that occurs in the state
3153 operations center because they are broadly looking at public
3154 works and the totality of it -- that even though we are in
3155 touch with them and coordinating with them, they are not
3156 necessarily always paying full attention to the
3157 water/wastewater side.

3158 So during Harvey we had situations where we would loop
3159 back to them and have conversations and we would have to go
3160 through a complete refresh --

3161 Mr. Shimkus. I wonder if I can jump in so I --

3162 Mr. Howe. Yes, please.

3163 Mr. Shimkus. So your position is that, and I am
3164 learning these acronyms as we go through the hearing, it
3165 should be raised to an emergency support function level and
3166 that would help?

3167 Mr. Howe. In other words, it is disaggregated now. If
3168 it was under one, then I think, as I've said to somebody
3169 before, that then those in emergency management would have
3170 the same red light flashing on water/wastewater as they do on
3171 lifesaving and everything else that they do because it would
3172 be a single support function and we know from the industry
3173 that there are -- you know, we have only talked about three

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

158

3174 essential services -- police, fire, and EMS. But without
3175 electric, water, and wastewater the first three can't
3176 function.

3177 Mr. Shimkus. Okay. Let me go to Mr. Lichtenstein.

3178 Mr. Lichtenstein. It is a dichotomous thing. I drove
3179 all around the islands -- Saint John, Saint Thomas, Puerto
3180 Rico, Vieques. So need for plans ahead of time, clearly.

3181 Standard operating procedures -- we talked about those
3182 earlier. But this is definitely a matrix thing. Can't be
3183 top down. It is not linear but yet there is a critical role
3184 for the U.S. government. What I saw, this dichotomous thing,
3185 was some unbelievable local efforts of stepping up to the
3186 plate. On the island of Vieques, and I don't know if you're
3187 familiar with that island but that is an island on the --

3188 Mr. Shimkus. We used to debate it a long -- couple
3189 years ago all the time.

3190 Mr. Lichtenstein. Yes. So here's a story about
3191 initiative. The U.S. Coast Guard, while Maria was still kind
3192 of hanging out, the captain there used initiative and sent
3193 some cutters over to Vieques before anybody else was there
3194 for days.

3195 So how do you -- how do you value that and how do you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

159

3196 enhance that kind of activity to help the locals? Clarity of
3197 leadership is key.

3198 Mr. Shimkus. Right.

3199 Mr. Lichtenstein. What I saw was lack of clarity of
3200 leadership. So this is matrixed and it is something that we
3201 are going to have to figure out how to structure and how do
3202 you value these local people that are just stepping up to the
3203 plate?

3204 Mr. Shimkus. And speaking of local people, Ms. del
3205 Valle -- Rodríguez del Valle?

3206 Ms. Rodríguez. Yes. I have to totally agree with Mark
3207 Lichtenstein's remarks. In our case being a community in San
3208 Juan basically the after -- right after Maria it was the
3209 residents the ones that took care of themselves and the
3210 institutions that have been working with them for a very long
3211 time came in the next day and that was the only outside help
3212 that they received in practically a month and this was San
3213 Juan with a lot of partners -- previously built partnerships.

3214 So the other thing that is helpful is for the -- in the
3215 case of the federal government it was very critical for us to
3216 have people on the ground that actually were able to listen,
3217 because sometimes you design a program that you think is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

160

3218 going to work very well everywhere and not necessarily all
3219 the circumstances are the same.

3220 So we were able to establish those relationships and
3221 improve dramatically the type of help that was being brought
3222 to the communities, particularly with the project of the blue
3223 roofs and other assistance that we finally got from FEMA and
3224 the federal government.

3225 Mr. Shimkus. Thank you.

3226 And let me, with my colleagues' permission so I can get
3227 Mr. Epperson on the record, Texas, local community -- how do
3228 we be careful that we are not part of the problem and, you
3229 know, we are from the federal government -- we are here to
3230 help, and then we end up not being helpful?

3231 Mr. Epperson. Thank you, Mr. Chairman.

3232 It is a very local response and effort from the
3233 beginning, and with the experience of Hurricane Harvey we
3234 really could not get out, could not get in for several days
3235 where we are located.

3236 We did -- we did -- we do have other local government
3237 contacts throughout Texas that were able to send high water
3238 rescue vehicles that were able to help out.

3239 So I think that initial response it is very local and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

161

3240 how you have to deal with that, and then once the flood
3241 waters recede and we start talking about projects to -- the
3242 enhancement projects and projects to make sure that the next
3243 time we have the high wind event or the high water event, I
3244 believe that is where we can partner with FEMA and the
3245 federal government and the other agencies.

3246 Mr. Shimkus. Thank you very much, and I appreciate my
3247 colleagues allowing me to go a few minutes over.

3248 Now I would like to turn to Mr. Tonko for five minutes.

3249 Mr. Tonko. Thank you, Mr. Chair.

3250 Ms. Rodríguez del Valle, where water systems are now
3251 working in Puerto Rico are there still concerns with water
3252 safety?

3253 Ms. Rodríguez. Yes. Yes, and the people are being told
3254 to boil the water before consumption. But when you have no
3255 power at home, you know, and the gas is limited it is very
3256 hard to comply with those basic health measures.

3257 Mr. Tonko. I have heard that there are over 200
3258 independent water systems on Puerto Rico but they serve a
3259 very small percentage of the population.

3260 Can you characterize the types of communities or people
3261 served by independent non-PRASA water systems?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

162

3262 Ms. Rodríguez. Well, I am not an expert in this. But
3263 from my knowledge, these are areas particularly in the
3264 mountain side of Puerto Rico where it was very difficult to
3265 provide formal services.

3266 So the families did community aqueduct systems decades
3267 ago and they have been living on those for a long time.

3268 Mr. Tonko. Thank you.

3269 And Mr. Epperson, your testimony mentioned that you need
3270 to make \$1.5 million worth in repairs to your water -- your
3271 wastewater treatment plant. How important is it to protect
3272 your community's investment by making sure that that facility
3273 is more resilient to future flooding?

3274 Mr. Epperson. I think it is very important, you know,
3275 that we do have the plant up and running with temporary
3276 repairs.

3277 Those are the more permanent repairs and -- but because
3278 of the location of that plant we really are going to look at
3279 an enhancement type project with that -- with that plant to
3280 send those wastewater flows to one of our other plants,
3281 expand that plant, because it is situated and located in a
3282 location less vulnerable to the rising waters that we
3283 experienced at this plant.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

163

3284 Mr. Tonko. And are there currently sufficient federal
3285 funding opportunities to help the communities assess and
3286 mitigate future vulnerabilities to their water supplies or
3287 water systems?

3288 Mr. Epperson. I believe there are opportunities. I am
3289 not certain that they are sufficient. You know, we are
3290 exploring what those opportunities are right now and moving
3291 through that process.

3292 Mr. Tonko. Thank you.

3293 And Mr. Howe, I am interested in how FEMA can improve
3294 its emergency support functions for the water sector. How
3295 does it compare to other critical infrastructure sectors?

3296 Mr. Howe. I think the difficulty we have is because it
3297 is spread out over multiple ESFs there is not a nationwide or
3298 entirety of a single operating system so it can vary from
3299 region to region, area to area.

3300 As I mentioned, we were -- we were successful in Texas
3301 because we've almost -- we have made it happen that way. But
3302 it is not -- it is not consistent. So there needs to be a
3303 consistent structure of how that works and we believe under a
3304 separate ESF that would happen.

3305 Mr. Tonko. Thank you.

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

164

3306 And Mr. Lichtenstein, what types of pollution occur --
3307 can occur from burning debris?

3308 Mr. Lichtenstein. Clearly, particulates or smoke. But
3309 that is the question that we want to answer -- what else is
3310 happening.

3311 So if it is a lower temperature burn there -- and if
3312 plastic -- I saw plastic tangled up with the debris and if
3313 that is burned it can potentially have dioxins, furans,
3314 polyaromatic hydrocarbons and other chemicals. But that
3315 really needs to be looked at.

3316 Mr. Tonko. Thank you.

3317 And I imagine that space is at a premium in areas like
3318 Puerto Rico and the U.S. Virgin Islands. What is the current
3319 state of the landfills there and what particular challenges
3320 exist because of the land challenge itself?

3321 Mr. Epperson. Yes. I can't speak with authority to the
3322 landfills but I do have some knowledge. Some of them are
3323 really exceeding capacity and exceeding federal regulations.
3324 Others are well run and doing fine.

3325 The main island of Puerto Rico, of course, has more land
3326 than the other islands. In the Virgin Islands there are
3327 serious issues.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

165

3328 There are only two landfills -- one on Saint Croix and
3329 one on Saint Thomas. Both have capacity issues and
3330 operational issues. So that is a big concern on those
3331 islands.

3332 Mr. Tonko. Thank you.

3333 And Ms. Rodríguez del Valle, if you had one
3334 recommendation to this subcommittee or to the committee in
3335 general, what would it be in regard to what you see right now
3336 in Puerto Rico?

3337 Ms. Rodríguez. I think disasters kind of bring out the
3338 best of the -- of the society and also the institutional
3339 flaws, and we are seeing a little bit of that currently in
3340 Puerto Rico, not only regarding the way in which we have been
3341 able to address the crisis.

3342 It has brought the best of the Puerto Rican people and
3343 its capacity to organize and do a great job when nobody else
3344 was doing it. But it has also brought to light issues
3345 regarding the way in which disaster relief was organized,
3346 particularly during the first days.

3347 It seemed to many of us living there that there was a
3348 lot of disorganization and some of the decisions actually
3349 delayed assistance to the people who needed it the most.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

166

3350 I also wanted to add one point regarding Mr. Shimkus'
3351 question and it has to do with federal government aid.
3352 Actually being able to be culturally sensitive is something
3353 as simple as having FEMA officers visiting people's homes to
3354 speak Spanish because most people in Puerto Rico do not
3355 understand English and sometimes decisions were being done
3356 regarding the type of aids that these families received with
3357 a language barrier in the middle.

3358 So perhaps that curtailed the ability of many of them to
3359 be able to actually get the help they needed.

3360 Mr. Tonko. Thank you very much.

3361 And with that, I yield back, Mr. Chair.

3362 Mr. Shimkus. Thank -- the chair thanks the gentleman.

3363 The chair recognizes the gentleman from Texas, Mr.
3364 Olson, for five minutes.

3365 Mr. Olson. I thank the chair.

3366 I am going to open with the praise and Texas brag about
3367 a friend and leader back home in Texas 22, Trent Epperson.
3368 And Trent, I should give you a proper Aggie greeting --
3369 howdy, my friend. Welcome.

3370 Trent is the assistant city manager of Pearland, Texas,
3371 as he mentioned. Pearland is the largest city in Brazoria

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

167

3372 County with over 120,000 people and growing, rapidly.

3373 Trent helps to run their half a billion dollar capital
3374 budget as well as overseeing both the city's public works and
3375 utilities department.

3376 Chair, we are so proud of Pearland and Brazoria County's
3377 response to Hurricane Harvey. Please tell the committee how
3378 many people died in Brazoria County because of Hurricane
3379 Harvey.

3380 Mr. Epperson. There were no people that died in
3381 Brazoria County during Hurricane Harvey.

3382 Mr. Olson. Zero. Nada. Nil. No deaths. That's
3383 amazing, despite five feet of rain in parts of Brazoria
3384 County. Is that correct?

3385 Mr. Epperson. Yes, sir.

3386 Mr. Olson. Okay. Now the fun stuff -- the questions.

3387 What kind of help did you get immediately after Harvey
3388 hit outside of Brazoria County from the federal government,
3389 from the EPA, maybe from FEMA, from other states, other
3390 entities?

3391 What would you change about the storm response lines of
3392 communication now to the next storm that is coming? We know
3393 it is coming.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

168

3394 Mr. Epperson. As far -- as far as immediate help, I
3395 think it was mostly locals that were able to do the -- all of
3396 the immediate response needs.

3397 We have been working with FEMA, meeting with them on a
3398 weekly basis since then. I believe that process for the
3399 immediate needs and the debris removal and developing our
3400 damage assessments is moving forward.

3401 One of the areas where I think that moving forward we
3402 want to improve as well as working with the feds improve is a
3403 buy-out program where we -- it has in the past been a -- kind
3404 of sporadic when there is a disaster.

3405 We move forward with a buy-out program. It occurs
3406 several months to maybe more than a year after the actual
3407 event itself. And so we see a need for accelerating that.
3408 There are people that are out of their homes right now and
3409 don't know whether to repair those homes and make those
3410 repairs because they don't know whether there is a buyout
3411 opportunity or not.

3412 So I think the ability to accelerate that and have that
3413 as an ongoing program even when there is not a disaster that
3414 just occurred would really help from a local's perspective.

3415 Mr. Olson. Anything else you wish from Washington --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

169

3416 what we could do better to help you guys get through that?

3417 Because you guys were awesome but we can help you I think a
3418 lot more, much more -- much quicker.

3419 I mean, it just seemed like over and over people calling
3420 me up, I can't get somebody to come out to my house to, you
3421 know, look at my house and assess the damage.

3422 For example, Pearland had five large -- four large dump
3423 trucks go in that heavy water. Three are flooded out. You
3424 are down to one dump truck. And so I guess, you know, we are
3425 trying to get resources to you.

3426 Anything we can improve on here in D.C.? Because you
3427 all do great but we want you to do better. We can help, I
3428 think.

3429 Mr. Epperson. Yes, sir. I think any of those resources
3430 would help.

3431 Mr. Olson. The previous panel, Trent, talked about
3432 planning scenarios with TCEQ and EPA. Has Pearland been
3433 involved in any of those? Just -- have you been involved at
3434 that level planning for another hurricane like Harvey? Have
3435 you been involved in that or are you sort of outside looking
3436 in?

3437 Mr. Epperson. We work, you know, with our local county

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

170

3438 emergency management as well as with the Texas Department of
3439 Emergency Management. But we haven't had any direct contact
3440 or work with those folks prepreparing for emergency.

3441 Mr. Olson. Have you had to adjust your plans for an 800
3442 years flood as opposed to a 500-year flood or a 100-year
3443 flood? I mean, how much have you adapted to what happened in
3444 August with Hurricane Harvey?

3445 Mr. Epperson. I think the big thing we have recognized
3446 is that our newer infrastructure designed to current
3447 standards fared very well even with the unprecedented
3448 flooding and that it is our areas that have been there for
3449 many decades that were designed to other standards or before
3450 standards were in place that were mostly affected and that
3451 those are the areas we want to concentrate on for future
3452 drainage improvement projects as well as other resiliency
3453 projects to make sure that those areas also are able to
3454 withstand the same type of flooding.

3455 Of greatest importance to that is the Clear Creek
3456 project which is a project sponsored by the Harris County
3457 Flood Control District and I believe that project has been
3458 submitted for federal funding to move forward after this
3459 event.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

171

3460 Mr. Olson. I am out of time and I want to say Gig'em my
3461 friend. Thank you.

3462 Mr. Epperson. Gig'em.

3463 Mr. Shimkus. The chairman now turns to another Texan,
3464 Mr. Green, for five minutes.

3465 Mr. Green. Well, I appreciate it and I married into the
3466 Aggie family. My son and our son-in-law and my two
3467 grandchildren now think they are going to be in the Corps
3468 Cadets.

3469 But be that as it may, Mr. Howe, in your testimony you
3470 know that some of the city of Houston's wastewater operations
3471 were overwhelmed during Harvey.

3472 Can you describe in detail on what locations? Was it
3473 mainly upstream, Buffalo Bayou? Because every creek and
3474 bayou I have in my area in east Harris County were out of
3475 their banks. But it was mostly the city of Houston and
3476 Buffalo Bayou that the wastewater treatment plants were
3477 overwhelmed?

3478 Mr. Howe. Yes, sir. It is my understanding on the west
3479 side of Houston the wastewater plant was flooded out. Part
3480 of that was due to controlled flooding out of the Addicks
3481 Reservoir, as you are familiar with that area over there.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

172

3482 They currently --

3483 Mr. Green. I don't represent it but I am familiar with
3484 it.

3485 Mr. Howe. Yes, I understand. The -- I understand from
3486 the city of Houston water utility they are currently dealing
3487 with a wastewater line that is in Buffalo Bayou where the
3488 bayou is sloughing off continually.

3489 They have a wastewater line that is on the side of that.
3490 It is an ongoing issue. Obviously, there needs to be a
3491 coordinated response on how that gets rebuilt and how their
3492 line gets reinforced or moved.

3493 So it is these ongoing issues. The water system
3494 operated just fine. They were able to put coffer dams around
3495 the northeast water filter galleries to keep the water system
3496 operating fine but wastewater, by its very nature, as Mr.
3497 Epperson mentioned, are built in lower level areas and they
3498 had some significant flooding, particularly in Houston's lift
3499 stations, too.

3500 Mr. Green. We have untold number of water districts
3501 outside the city limits of Houston or Pasadena and I know
3502 they -- because they are built on the bayou close to where
3503 they're -- they treat the effluent and it goes -- they have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

173

3504 permits to go into the bayous.

3505 Do you have any idea on how many of those were also
3506 impacted?

3507 Mr. Howe. I don't have specific numbers. The
3508 difficulty for -- in our response during Hurricane Harvey,
3509 obviously, was that there was a delayed response. No one
3510 could do an assessment until the flood waters went down.

3511 Many of those operations were, obviously, shut down when
3512 the flooding started but it doesn't mean there wasn't a
3513 pollutant. I don't have specific numbers, though.

3514 Mr. Green. Okay. Well, I have the eastern part of the
3515 county and, like I say, I could give you the watersheds from
3516 the bayous and -- but Buffalo Bayou and the shipping port of
3517 Houston actually runs right in the middle of our district,
3518 and whether it be Brays or Sims, Sims Bayou looked like it
3519 was the one that didn't flood as bad as Brays and on the
3520 north side I have Greens Bayou, Carpenters Bayou in channel
3521 view, Hunting Bayou and --

3522 Mr. Howe. I grew up in Houston. I am familiar with all
3523 these.

3524 Mr. Green. All these -- and all of them were and these
3525 were multiple flooding experiences and we continue to work

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

174

3526 with the Corps of Engineers and, of course, our Harris County
3527 Flood Control District -- that a lot of our neighboring
3528 counties don't have flood control districts but in Harris
3529 County we pay property taxes to be able to have drainage
3530 ditches and, you know, take care of our bayous along with the
3531 partnership with the Corps.

3532 So it is a big challenge. Your -- Mr. Howe, in your
3533 testimony you said that the city of Houston was overwhelmed.
3534 What part of the city did they -- did they shut down the
3535 wastewater system or did --

3536 Mr. Howe. It is my understanding --

3537 Mr. Green. -- what part of the city was impacted?

3538 Mr. Howe. Excuse me. I am sorry.

3539 On the west side of Houston they did have one of their
3540 wastewater plants completely flooded out. It was out of
3541 service. They were advising people not to flush, those who
3542 were still in their residences, and they were -- they had the
3543 resources to get that plant back online in three or four
3544 days, once the water -- the water receded.

3545 You know, as you may be familiar, most of Houston's
3546 wastewater system is with forced mains or lift stations and
3547 they have a significant number of those and I know a number

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

175

3548 of those were flooded out.

3549 Houston proper was pretty resilient and a lot of that,
3550 much like some of the other cities around there. So I don't
3551 have specific details as to how they came back but they were
3552 very resilient on their own.

3553 Since Hurricane Ike they have built up a lot of
3554 resiliency within the city of Houston.

3555 Mr. Green. Well, in Harris County also many years ago,
3556 because you recognize we were subsiding, the city of Houston
3557 is now almost totally on surface water and they have surface
3558 water rights.

3559 I know Pasadena I represent complains about having to
3560 pay high water rates for the city of Houston.

3561 So we have a central location for surface water so we
3562 don't continue to subside. Do you think there is -- should
3563 be an effort to try and create mega wastewater treatment
3564 facilities and partner with an untold number of water
3565 districts that we have and see how that would work?

3566 Mr. Howe. You know, obviously, sir, that is a local
3567 decision. The first thing, when you said it, that popped in
3568 my head was the -- an example of the Trinity River Authority
3569 in the Dallas-Fort Worth area, which is a mega wastewater

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

176

3570 operation without regard to issue.

3571 You know, most of Houston's water comes from the
3572 discharge in the Trinity River from TRA. That might be a
3573 possibility. I mean, there are any number of small package
3574 plants in the muds that you spoke of outside of the Houston
3575 area.

3576 There might be an effort to look at consolidating those
3577 in a system that would be more efficient. There are enormous
3578 costs involved in doing that and getting to that, you know,
3579 rerouting sewer lines and everything else. But it is those
3580 sort of options I think everybody needs to look at.

3581 Mr. Green. Well, and I am already over time, but with
3582 the amount of money we are going to have to do to redo those
3583 plants and also the houses and the businesses downstream who
3584 are in danger of, you know, because of that effluent being in
3585 their houses and their -- in their businesses.

3586 So thank you, Mr. Chairman.

3587 Mr. Shimkus. I thank my colleague.

3588 I want to thank the colleagues who stayed and
3589 participated in the second panel. I personally really
3590 appreciate it. An observation is that these disasters that
3591 we are talking about in this event, if you noticed -- for the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

177

3592 panelists, those of us who have been through them really kind
3593 of the same type of story.

3594 I do think there is an opportunity for us to work
3595 collectively and look at the Stafford Act. This is multi-
3596 jurisdictional, though. This would be a long-term, five, six
3597 years trying to get a response.

3598 I am -- you know, I just -- I keep thinking about big
3599 piles of stuff and how do you separate them. I am a big
3600 trash energy guy. I would like to see more of that. We have
3601 some locally that I have toured.

3602 Buy-out programs -- we just had a flood five years ago.
3603 People are just getting their checks now. So there is a lot
3604 of ways these things can be fixed so we do appreciate your
3605 testimony.

3606 I also want to tell my -- to the committee that we have
3607 five legislative days to submit opening statements. I forgot
3608 to do that at the beginning of this.

3609 I want to thank you all for being here and pursuant to
3610 committee rules, I remind members that they have 10 business
3611 days to submit additional questions for the record.

3612 If you get those, if you would reply we would appreciate
3613 it and I ask that you submit your responses within 10

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

178

3614 business days upon receipt of the questions.

3615 Of course, if your -- can't use your electric stuff
3616 because you are in a place where there is no electricity that
3617 might be a challenge. But we do appreciate you being here.
3618 There is a lot of work for us to do.

3619 Thank you for your time and with that, I will adjourn
3620 the hearing.

3621 [Whereupon, at 12:56 p.m., the committee was adjourned.]